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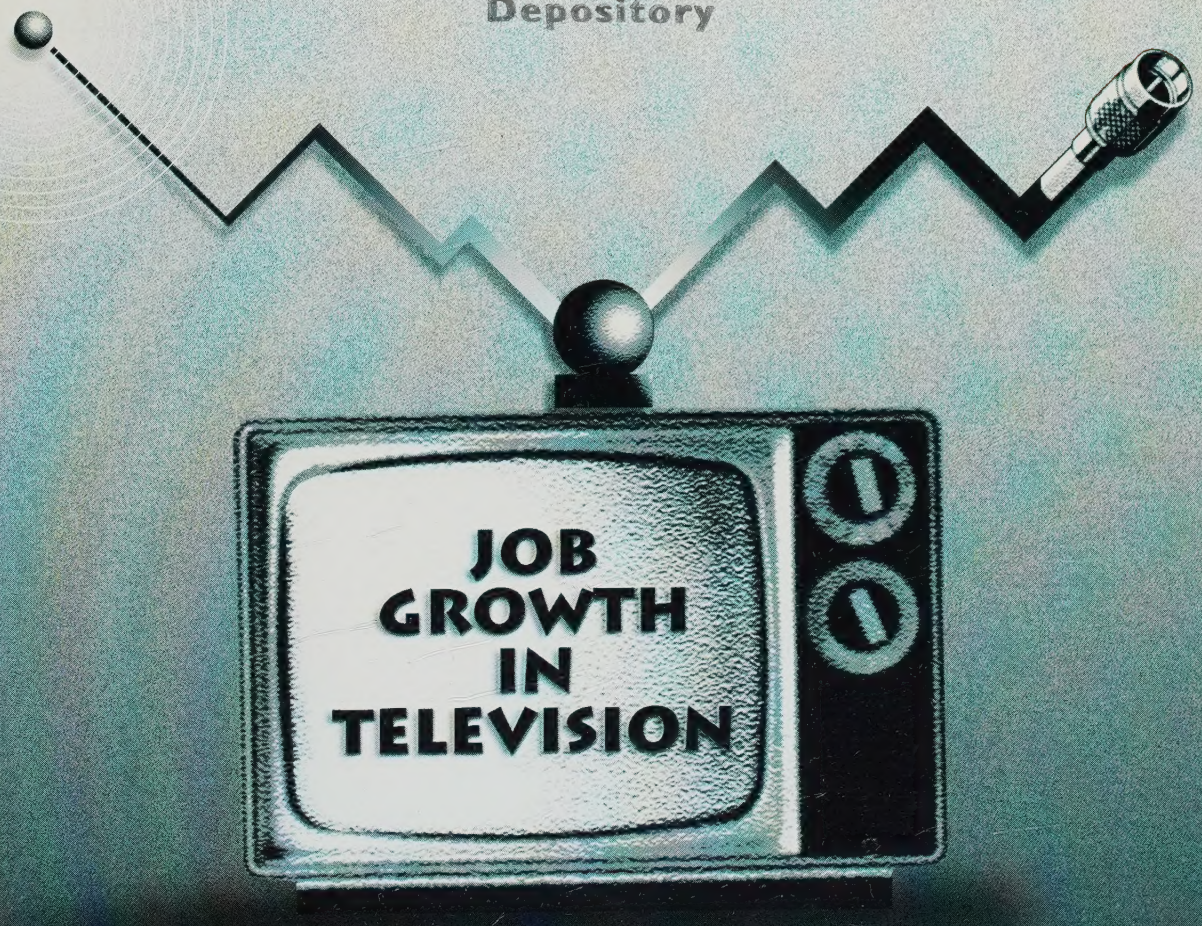

ALSO IN THIS ISSUE:

PRODUCER PRICES IN 1999

WOMEN, WORK, AND VALUES

U.S. Department of Labor
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Katharine G. Abraham, Commissioner

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MONTHLY LABOR
REVIEW

Volume 123, Number 8
August 2000

Articles

Job growth in television: cable versus broadcast 3
Technology, demand, and easing of some regulations helped shift employment from broadcast TV to cable and other pay-TV services
Dominic Toto

Rising producer prices in 1999 dominated by energy goods 15
Surging energy prices push up the Producer Price Index for crude, intermediate, and finished goods
Eleni Xenofondos and *William F. Snyders*

Married women, work, and values 26
Economic and political values are more prominent among working women; social and religious values play a greater role for women outside the labor force
Mahshid Jalilvand

Report

The impact of strikes on current employment statistics 32
Karthik A. Rao

Departments

Labor month in review 2
Technical note 32
Précis 40
Book reviews 41
Publications received 42
Current labor statistics 45

Editor-in-Chief: Deborah P. Klein • Executive Editor: Richard M. Devens • Managing Editor: Anna Huffman Hill • Editors: Brian I. Baker, Bonita L. Boles, Richard Hamilton, Leslie Brown Joyner, Lawrence H. Leith • Book Reviews: Roger A. Comer, Ernestine Patterson Leary • Design and Layout: Catherine D. Bowman, Edith W. Peters • Contributors: Ray Denison

The August *Review*

This month's issue leads with a discussion of the emergence of cable and other pay television industries. In "Job growth in television: cable versus broadcast, 1958–99," Dominic Toto traces the history of the television industry, examines employment trends in cable and other pay television services and in radio and television broadcasting, and reviews the more significant regulatory, technological, and economic changes that have taken place since the early 1960s. Toto finds that broadcast television accounted for most of the job growth during the early part of the study period, and cable and other pay television had the most growth during the latter part.

The report on producer prices is our final of a roundup of economic events during the last year of the decade. (Articles on employment and consumer prices appeared in February and April, respectively). In "Rising producer prices in 1999 dominated by energy goods," Eleni Xenofondos and William F. Snyders report that the Producer Price Index (PPI) rose at all stages of processing in 1999. Excluding food and energy, the increases for finished goods and intermediate materials ranged from about 1 to 2 percent, respectively; for crude nonfood materials excluding energy, the increase was 14 percent.

The *Review* often reports on economic conditions of women—their participation in the labor force, marital status, and earnings.This month, in "Married women, work, and values," Mahshid Jalilvand examines the personal-value structures of women to ascertain whether they have any effect on their labor market-related decisions. Women's personal values appear to be rank-ordered in a hierarchy that differs between working and "nonworking" women. The data indicate that economic and political values are relatively more important for working women than are social and religious values, which are relatively more important for nonworking women.

This month also features a Technical Note explaining how strikes affect the Bureau's monthly employment figures. Karthik A. Rao, in "The impact of strikes on current employment statistics," emphasizes that it is important for users of the data to understand how strikes affect the estimates "so they can accurately interpret the economic meaning of the change in the number of employees over the month."

Wage of a salesman

Five industries employed more than three-quarters of all retail salespersons in 1998. Of these five industries, automobile dealers and service stations paid salespersons the most, and apparel and accessory stores paid the least. Salespersons in the automobile dealers and service stations industry received $15.75 per hour in 1998. In comparison, salespersons in the apparel and accessory stores industry averaged $7.43 per hour.

The other three most common industries for retail salespersons in 1998 were furniture and home furnishing stores, general merchandise stores, and miscellaneous retail establishments. The mean hourly wage in furniture and home furnishing stores was $10.25 in 1998. In general merchandise stores, the average wage was $7.88 and miscellaneous retail establishments were close behind at $7.76. Additional information is available in *Occupational Employment and Wages, 1998*, BLS Bulletin 2528.

Cashier, cook common jobs for youths

Among youths aged 15 years old in 1995–97, 38 percent held an "employee" job—defined as an ongoing relationship with a particular employer. By a wide margin, cashier was the most common occupation among 15-year-old females with employee jobs; by a small margin, cook was the most common job for males.

Cashier was the occupation of the longest-held job for 16 percent of the female youths with employee jobs. In comparison, the next most common occupations were waiters and general office clerks, at 6 percent each, Rounding out the top five occupations for 15-year-old females were salesworkers (other commodities) and miscellaneous food occupations, at 5 percent each.

Of the male youths with employee jobs, 8 percent worked as cooks in their longest-held job, while 7 percent held positions as janitors and cleaners. The next most common jobs for males were miscellaneous food occupations, waiters' and waitresses' assistants, and cashiers, at 6 percent each. Note that jobs such as babysitting or yard work done on an as-needed basis or for multiple employers are considered "free-lance" jobs, rather than "employee" jobs. Additional information is available from the *Report on the Youth Labor Force*.

Regional compensation pattern

In March 2000, workers in private industry in the Northeast received the highest wages and salaries per hour of any region. The average wages and salaries of private industry workers were as follows:

Northeast	$16.37
West	15.45
Midwest	13.91
South	13.09

Moreover, the average cost to private employers of benefits also was highest in the Northeast. Workers in the private sector in the Northeast were paid $6.30 per hour on average in benefits, $0.87 more per hour than in the West, $0.98 more than in the Midwest, and $1.58 more than in the South.

Additional information is available in "Employer Costs for Employee Compensation, March 2000," news release USDL 00–186. □

Job growth in television: cable versus broadcast, 1958–99

As the television industry matured over the last 50 years, technological improvements, increased demand for video programming, and the easing of some regulations helped shift employment from broadcast television to cable and other pay television services

Dominic Toto

Broadcast television made its public debut at the New York World's Fair in 1939, dramatically changing the way people live, work, and spend their free time.[1] A decade later, community antenna television, an early form of cable television, spread broadcast signals over rural Pennsylvania and Oregon.[2] Currently, nearly all homes in the United States with televisions have access to some form of cable television, with approximately two-thirds of U.S. households subscribing to a local cable service.[3]

For more than 40 years, employment in all areas of television program delivery has risen substantially. During the first half of this period, radio and television broadcasting accounted for most of the job gains, while during the second half, more of the growth occurred in cable and other pay television services. Throughout the period, changing legislation has greatly affected the way video service providers conduct their business, contributing to the trend toward more rapid growth in cable services. In addition to key regulatory and policy changes, growing consumer demand for television entertainment and related technological innovations have helped boost employment levels in all video-providing industries.

This article compares the employment history of cable and other pay television services with that of radio and television broadcasting; it also reviews some of the more significant regulatory and economic changes that have occurred over the period. The chronology is broken into three phases: The first phase (1958–72) covers the early years up to when the Federal Communications Commission (FCC) introduced new rules regarding cable television in March 1972.[4] The second phase (1972–84) covers the subsequent period of rapid employment growth in the television industry up to when Congress enacted the Cable Communications Policy Act of 1984. The third phase—during which employment growth slowed down considerably and additional regulatory and economic changes took place, covers the period from 1984 to 1999.[5] The first part of the analysis focuses on employment during the study period, and the second half looks at some of the technological changes that have shaped the industry since its inception.

The television industry

According to the 1987 Standard Industrial Classification (SIC) system, the primary function of television broadcasting stations (SIC 4833) is "broadcasting visual programs by television to the public."[6] Cable and other pay television services (SIC 484), including satellite services,

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Table 1. Top 10 occupations in cable and other pay-TV and radio and television broadcasting, 1998

Rank	Occupation	Level	Percent of industry total
	Cable and other pay television (SIC 484)		
1	Installers and repairers	40,520	21.1
2	Customer service representatives	34,920	18.2
3	Order clerks	6,130	3.2
4	First-line supervisors—product	5,230	2.7
5	Dispatchers, except police and fire	5,170	2.7
6	All other sales and related	5,120	2.7
7	First line supervisors-administrative	5,090	2.7
8	Sales agents, advertising	5,000	2.6
9	General managers and executives	4,680	2.4
10	Engineering and related technicians	4,030	2.1
	Radio and television broadcasting (SIC 483)		
1	Announcers	46,100	18.7
2	Sales agents, advertising	25,280	10.3
3	Broadcast technicians	22,990	9.4
4	Producers, directors, actors	17,890	7.3
5	Reporters and correspondents	11,320	4.6
6	General managers and executives	8,620	3.5
7	Camera operators	6,900	2.8
8	Photographers	6,800	2.8
9	Writers and editors	6,040	2.5
10	Other professionals and technicians	5,670	2.3

distribute "visual and textual television programs, on a subscription or fee basis."[7] Broadcast and cable establishments may also produce taped television programs, but it is not their main line of business. (Firms mainly producing taped television or motion pictures are classified in the services industry—specifically, in SIC 7812, motion picture and video tape production.)

What the workers do. The workforces of the two video distribution markets differ significantly. Table 1 shows the top 10 occupations in cable and other pay television services (SIC 484) and in radio and television broadcasting stations (SIC 483).[8] Installers and repairers (21 percent) and customer service representatives (18 percent) stand out as the top two job categories in cable and pay television, together making up nearly two-fifths of employment in the industry. In radio and television broadcasting, however, employment is concentrated among announcers (19 percent), advertising sales agents (10 percent), and broadcast technicians (9 percent). That announcers occupy the top of this list most likely reflects the "radio" portion of the industry more than the "television" portion. Advertising sales agents and general managers are the only occupations to make both lists, but they are more heavily used in radio and television broadcasting. Within cable and other pay television, 6 of the top 10 job categories were sales related, customer service, or supervisory occupations. More "artistic" categories—such as announcers, actors, reporters, photographers, and writers—appear among the leading occupations in radio and television broadcasting.

What the workers earn. In 1999, nonsupervisory workers in the radio and television broadcasting industry earned, on average, $18.38 per hour. This was about 26 percent more than the average hourly earnings for cable and other pay television services, and 39 percent more than workers in the total private economy.[9] However, when looking at average *weekly* earnings, which take the number of hours worked during the survey period into account, workers in radio and television broadcasting earned $656 per week, only about 9 percent more than workers in cable television. Nonsupervisory workers in cable television averaged 41.4 hours per week, or 5.7 hours more than workers in radio and television broadcasting.

Employment trends

The employment data used in this article are from the BLS Current Employment Statistics (CES) program, also known as the "establishment survey."[10] CES employment estimates for all communications (SIC 48) and for radio and television broadcasting (SIC 483) begin in 1958. (See table 2.) Although the employment history for cable and other pay television services (SIC 484) does not begin until 1988,[11] a reasonable proxy series can be constructed back to 1958, by subtracting telephone communications (SIC 481) and radio and television broadcasting (SIC 483) from total communications. The resulting composite series "pay television and other communications" (SIC 482,4,9), can be used as a rough estimate of the growth in cable and other pay television services. Using this proxy series, the following analysis compares employment in pay television and other communications over

Table 2. Employment in communications, annual averages for selected years, 1958–99

[In thousands]

SIC code	Industry	Series beginning date	1958	1982	1988	1999
48	Communications	1958	860.0	1,417.1	1,279.9	1,551.5
481	Telephone communications	1947	732.1	1,071.8	901.1	1,069.7
483	Radio and television broadcasting	1958	83.6	210.3	227.1	247.8
4832	Radio broadcasting stations	1982	–	107.7	117.5	116.3
4833	Television broadcasting stations	1982	–	102.6	109.6	131.5
482,4,9	Pay television and other communications	1958	44.3	135.0	151.6	234.0
484	Cable and other pay television services	1988	–	–	110.8	200.5
482	Telegraph and other communications	1985	–	–	16.1	11.1
489	Communications services, n.e.c.	1985	–	–	24.7	22.4

Dash = data not available.

n.e.c.= not elsewhere classified.

the last 40 years with that of television broadcasting over the same period.

Cable and other (nonbroadcast) distributors of television shows have made great strides in establishing themselves as major employers in video services.[12] From 1958 through 1999, employment in pay television and other communications grew by an average annual rate nearly twice that of the total nonfarm economy. Radio and television broadcasting, by contrast, grew at a pace closer to that of the overall economy. (See tables 3 and 4.) In 1958, radio and television broadcasting employed nearly twice as many workers as pay television and other communications; by 1999, however, employment levels in the two industries were about the same.

While the 40-year trend indicates more rapid employment growth in pay television and other communications, it masks some interesting, more short-term trends. (See chart 1.) Over-the-air television stations had already been in existence for at least 12 years by 1958, and radio and television broadcasters—the principle distributors of broadcast signals—accounted for roughly 84,000 workers at the time. Over the ensuing 14 years, employment in radio and television broadcasting rose at a brisk pace, accounting for 79 percent of the job growth in the combined total radio and television services (SIC 483 and 482,4,9) from 1958 to 1972. Employment in pay television and other communications expanded at a much slower pace over the same period.

The trend changed significantly during the 1972–84 period, with the introduction of new FCC rules governing cable in 1972,[12] as well as the advent of the satellite and surging consumer demand for video services. Employment in total radio and television services grew more rapidly than the overall economy, with pay television and other communications expanding twice as rapidly as radio and television broadcasting (9.1 percent versus 4.2 percent). A combined total of 191,000 jobs were added over the period—86,000 in radio and television broadcasting and 105,000 in pay television and other communications.

In the years following 1972, the FCC altered or abolished many of the rules regarding cable television, important deregulatory moves that at least partly explain the hiring surge in the industry over the 1972–84 period. In 1977, for example, many of the franchise standards were eliminated, and in 1978, a simple registration process replaced the former process of applying for a certificate of compliance, making it easier and less costly to operate a cable system.[14] Then, in July 1980, the FCC repealed rules that had limited a cable system's right to import distant signals and that required exclusive or nonduplicative programming by local cable operators.[15] In 1983, the FCC eliminated its rule requiring cable television operators to file financial information.[16] These deregulatory changes helped free cable systems from restrictions put in place in the 1960s and early 1970s.

In October 1984, Congress formally amended the Communications Act of 1934 by enacting the Cable Communications Policy Act of 1984.[17] In some important ways, 1984 marks a turning point for employment growth in the television industry. Following that year, employment peaked in 1985 for both radio and television broadcasting and pay television and other communications. Through 1999, annual job growth decelerated to less than 1 percent in radio and television broadcasting. Losses accrued in pay television from 1986 to 1988, and employment did not fully recover until 1994, when growth began to accelerate once again. The period from the late 1980s through the early 1990s was one of consolidation for cable television. Many of the new alternatives to cable (such as satellite systems) did not fare well in the mid-1980s. In addition, increased video rentals had a negative effect on the cable industry. Home satellite dishes, complete with expanded channel capacity, started to make an impact in the early 1990s, and this development helped offset some of the drags on employment in pay television and other communications.

The revision of the SIC system in 1987 paved the way for

Table 3. Employment in the television and radio communications industry, selected years, 1958–99

[Levels in thousands]

Industry	1958		1972		1984		1999	
	Level	Percent	Level	Percent	Level	Percent	Level	Percent
Total television and radio	127.9	100.0	195.9	100.0	386.9	100.0	481.8	100.0
Radio and television broadcasting	83.6	65.4	137.2	70.0	223.5	57.8	247.8	51.4
Pay television & other communications	44.3	34.6	58.7	30.0	163.4	42.2	234	48.6

Table 4. Employment change in the television and radio communications industry, selected periods, 1958–99

[Levels in thousands]

Industry	1958–99		1958–72		1972–84		1984–99	
	Level	Average annual percent change	Level	Average annual percent change	Level	Average annual percent change	Level	Average annual percent change
Total nonfarm	...	2.3	...	2.6	...	2.1	...	2.1
Total television and radio	353.9	3.3	68.0	3.1	191.0	5.9	94.9	1.5
Radio and television broadcasting	164.2	2.7	53.6	3.6	86.3	4.2	24.3	0.7
Pay television & other communications	189.7	4.3	14.4	2.1	104.7	9.1	70.6	2.5

BLS to begin publishing employment data specifically for cable and other pay television services (The composite industry "pay television and other communications" used in this study includes telegraph and other communications, such as radar and satellite tracking, and communications services, not elsewhere classified.) In early 1988, employment in cable and other pay television services (SIC 484) about equaled that of television broadcasting stations (SIC 4833); by the end of the year, cable employment exceeded that of television broadcasters. The gap continued to widen over the next decade, with employment in cable and other pay television services growing by an average of 5.6 percent per year. In contrast, television broadcasting stations grew by only 1.7 percent annually over the same period. (See chart 2.)

In summary, from 1958 through 1972, the maturing radio and television broadcasting industry added jobs more rapidly than cable and other pay television services. Over the next 12 years, both industries grew much faster, with pay television (9.1 percent) outpacing radio and television broadcasting (4.2 percent). After 1984, the employment trends in both series slowed until the early 1990s, when they began to accelerate after 1992, especially in pay television and other communications. From 1988 forward, cable and other pay television services (SIC 4841) maintained relatively steady annual growth, as its employment level surpassed and pulled away from that of television broadcasting. In 8 of the last 11 years, employment in cable and other pay television services has grown by 4 percent or more. By 1999, there were 52 percent more workers in cable and other pay television services than in television broadcasting stations.

The growth of cable television

In addition to rapid employment growth, other statistics document growth in the cable television industry. By 1999, two-thirds of households with televisions subscribed to cable services. The growth of cable subscribers mirrors that of the industry's employment until the mid-1980s. While employment stagnated until after the 1990–91 recession, the number of subscribers continued to expand, with more than 65 million households subscribing to cable television in 1999.[18] (See table 5.)

Cable systems, which provide service in a given geographic area and generally serve 50,000 or more subscribers,[19] grew more rapidly over the period than television broadcasting stations, cable's main competition. In 1958, there were approximately equal numbers of television broadcasting stations and cable systems. Since then, annual growth for television stations averaged only 2.8 percent through 1999, compared with 7.7 percent for cable systems. (See chart 3). The growth of

Chart 1. Employment in radio and television broadcasting versus cable and other pay televison services, 1958–99

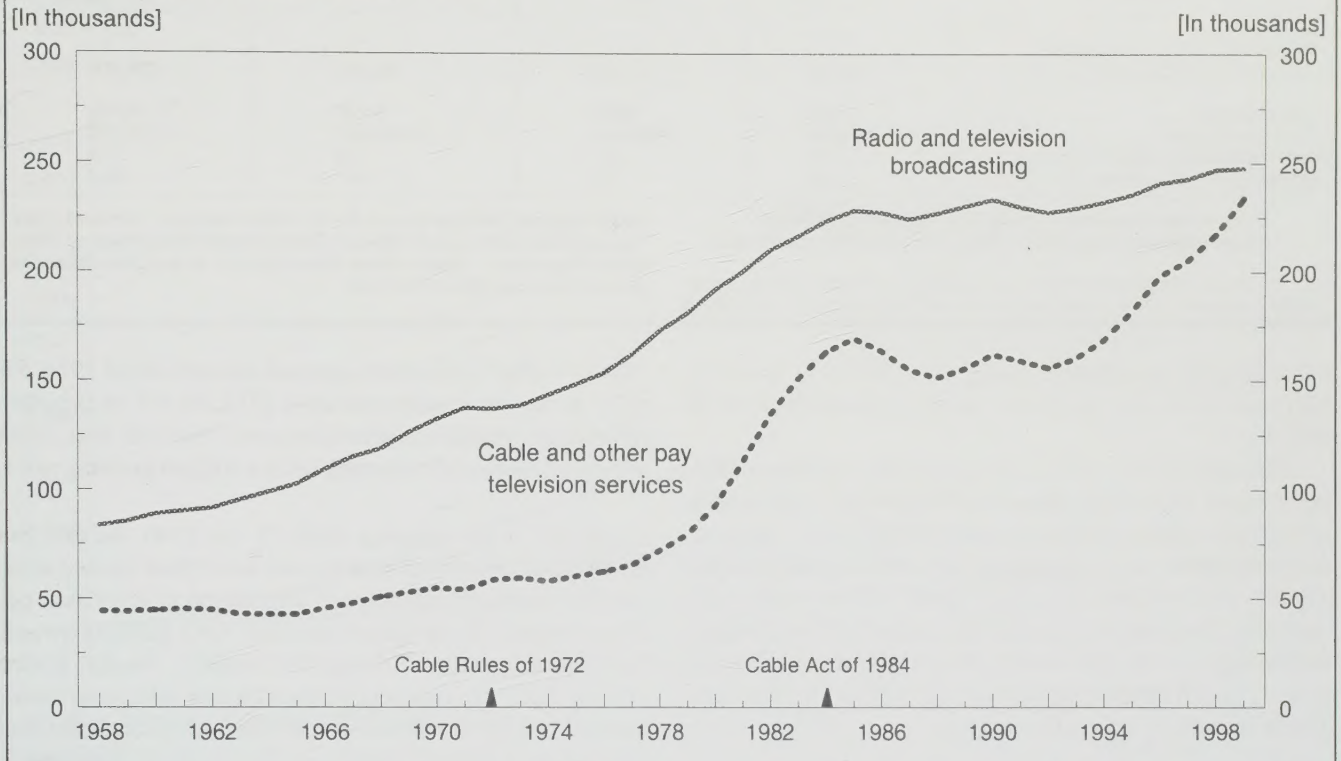


Chart 2. Employment in cable and other pay television versus broadcast television, 1988–99

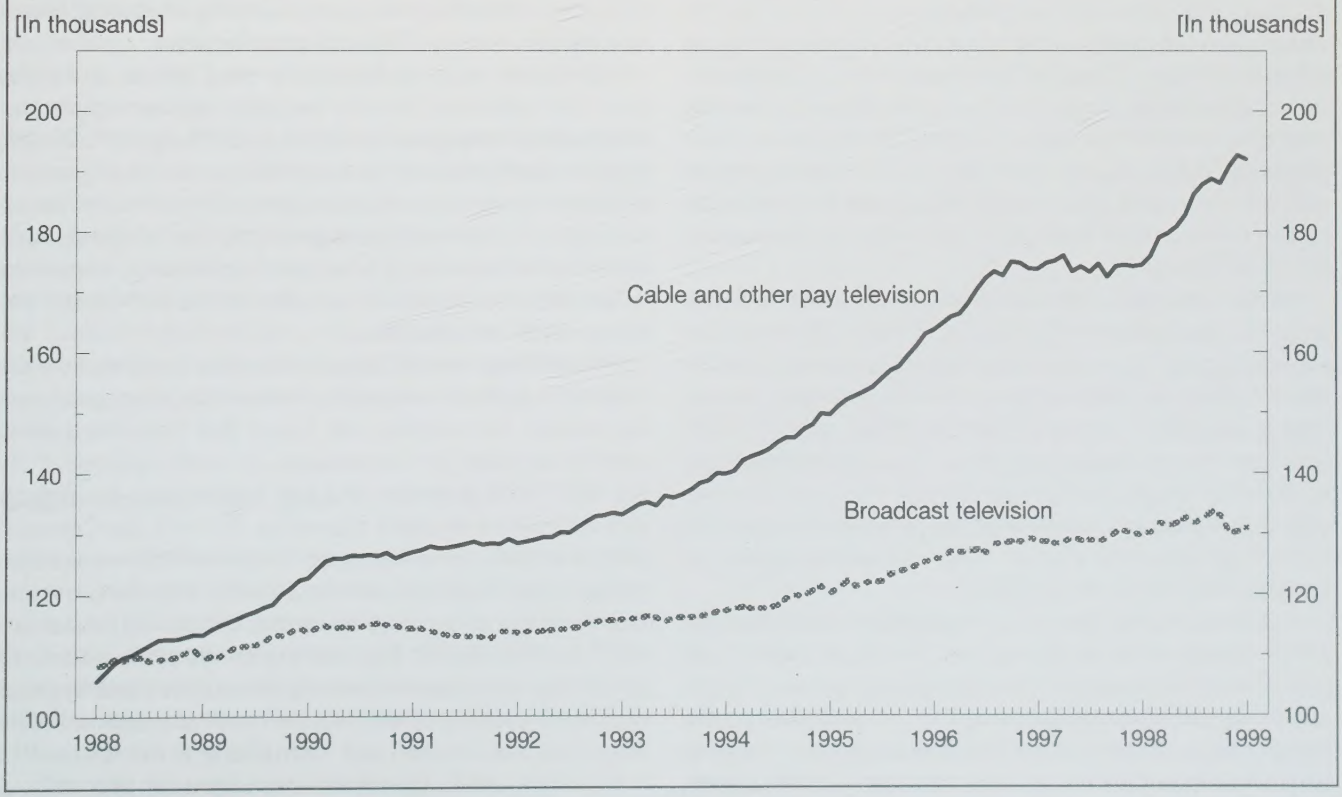


Table 5. The growth of cable TV

Industry	1958	1972	1984	1999
Pay-TV and other communications employment (SICs 482,4,9)	44,300	58,700	163,400	234,000
Cable systems	525	2,841	6,200	10,466
Cable subscribers	450,000	6,000,000	29,000,000	65,000,000
National cable networks	(1)	(1)	48	214
Cable's market penetration	(2)	(2)	43.7	68.0

[1] Cable network data begin in 1976, when the number totaled 4.
[2] Market penetration data begin in 1975, with 13.2 percent penetration.

SOURCES: Employment data: BLS Division of Monthly Industry Employment Statistics. Systems, Subscribers: Warren Publishing, Inc., *Television & Cable Factbook*, Services Volume No. 67, 1999. Networks: National Cable Television Association, *Cable Television Developments*, Spring/Summer 2000. Market Penetration: Nielsen Media Research, from NCTA's *Cable Television Developments*, Spring/Summer 2000.

cable systems accelerated during the 1980s, but it leveled off in the 1990s, due mainly to a wave of consolidation in the industry.[20]

Although closely related, it is the greater number of channel choices with better reception that sets the cable market apart from regular television broadcasting. Today, cable operators provide video programming to their customers using satellite earth stations and coaxial cable or fiber optics as the main lines for transmitting television signals. This advanced technology did not exist during the early years of television and prevented rapid expansion in the number of video programs offered by cable distributors.

The early years of television

Six television broadcasting stations were in operation in 1946,[21] and the earliest cable systems were built during the following 4 years. These latter systems were constructed to serve homes on the "fringe" of the broadcast area, those who otherwise would not be able to receive clear signals from the television station. Cable distributors placed community antennas on mountain tops or other high points and connected homes to the towers with cables, allowing them to receive broadcast signals.[22]

At the time, cable television was a very labor-intensive business, and despite high demand, it was difficult to find enough capital to launch a new cable enterprise. Another obstacle faced by the cable pioneers was obtaining permission to use public rights-of-way and utility poles.[23] Cable television was a simple application of available technology in the early years, and operators were capable of carrying only a few channels, because of the primitive transmission technology involved and the relatively sparse number of broadcast signals to retransmit.[24]

Cable television went largely unregulated until the mid-1960s. In their book on the industry, Patrick R. Parsons and Robert M. Frieden identify several historical phases of cable television within the period from 1947 to 1972. During the initial 5 years of this era, the first modern systems began to install wire-based television. After that, many family-owned, "Mom-'n-Pop" operations sprouted up until about 1964. Finally, during the 8 years ending in 1972, the FCC began instituting rules regulating cable television.[24] Nevertheless, cable television continued to expand, but not without growing pains.

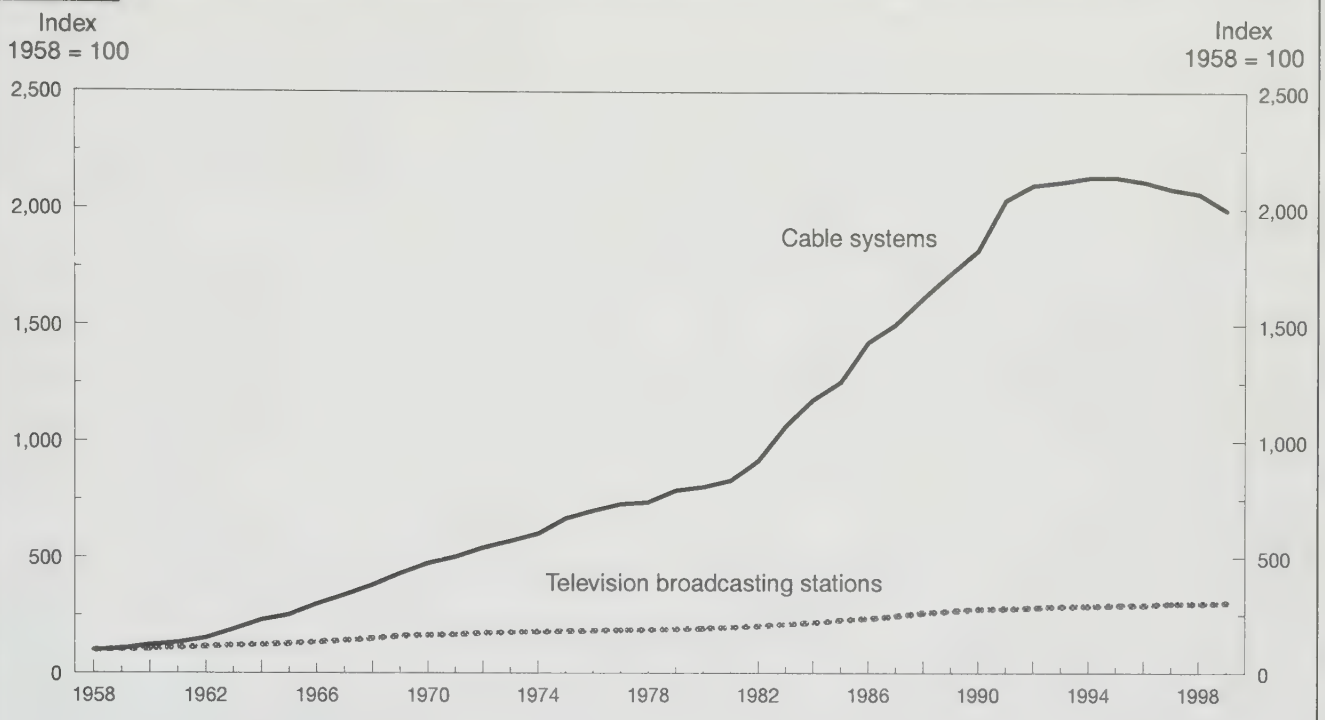
Regulation in the industry, 1940–72. By 1940, the FCC had tested on-air television stations and authorized limited commercial television operation.[26] Regulation of television occurred because the broadcast spectrum was a publicly owned, but limited resource.[27] From 1948 to 1952, the FCC placed a 4-year freeze on awarding licenses for new television broadcasting stations. The airwaves were becoming congested, and the FCC needed more time to sort out issues on standards.[28] Meanwhile, largely due to the freeze, demand for cable television services increased in areas not yet served by any form of television, and cable systems responded by forwarding broadcast signals to these additional communities.

In 1958, the FCC took the position that it had no jurisdiction over cable television, because the cable operator simply provided a piece of equipment and did not carry a signal.[29] As cable grew, however, local television stations regarded the importation of distant signals as a competitive threat. Because cable operators received broadcast signals essentially free of charge, additional stations in a viewing area could fragment local advertising dollars and drive the local broadcaster off the air.[30] Heavy lobbying ensued on both sides.

A year later, the FCC launched its first study on how the cable television industry affected the television broadcasting market, but nothing was found that could be used to restrict the entry or continuation of cable systems.[31] By the mid-1960s, however, the FCC had become the regulatory authority over cable television. In 1962, the Commission ruled that cable operators could use microwave systems to relay distant broadcast signals, with the provision that there be no adverse economic effects on broadcasters.[31] In 1966, the FCC froze the expansion of all cable firms in the top 100 markets and stipulated that cable systems obtain the consent of any remote broadcast station before importing that channel and distributing it to viewers.[33]

In effect, cable television was regulated as a *natural*

Chart 3. Index of growth of cable systems and television broadcasting stations, 1958–99



SOURCE: *Television & Cable Factbook* (Washington, DC, Warren Publishing, Inc., 1999).

monopoly: an entity that incurs significant economies of scale as output (the number of subscribers) increases.[34] Local franchising authorities granted these monopolies on the basis that inefficiencies, such as redundant line duplication, would have arisen if more than one firm provided video programming.

Although the first formal FCC restrictions on cable were in place by the late 1960s, the cable industry had managed to evolve from a transmission service to an active player in the video program delivery market. More specifically, channel capacity had risen from 3 or 4 to about a dozen.[35] Cable television was basically reborn, and as the financial health of the industry improved, larger businesses, and their capital, were increasingly attracted to cable. By the mid-1960s, television broadcasters themselves owned nearly 30 percent of all cable systems.[36]

Cable and satellite growth, 1972–84

After several years of restricting cable firms from receiving and distributing long distance television broadcasting signals, in March 1972 the FCC issued new rules that eased some of the limitations and restrictions—the *Cable Rules of 1972*. Cable firms were granted permission to import distant signals into major markets, but they were still limited in terms of quantity and variety.[37]

The early and more restrictive pay television rules limited cable operators' ability to offer better products outside of broadcast channels. With the introduction of satellite technology in the industry, cable television gained the support of a communications network in the sky, ushering in a new era in video program delivery. The first use of satellites allowed for more long-range capture of remote broadcast signals. In 1975, Home Box Office (HBO) rented a satellite to distribute a boxing program to cable systems in Florida and Mississippi.[38] The fusion of cable and satellite technology permanently changed the way television is viewed in the United States. Satellites allowed cable franchises to expand channel capacity and offer more programming alternatives. Similar to the earlier effect of cable television on the entire television market, the eventual role of satellites in the video programming service industry would change from a program delivery tool to a distribution competitor. New channels, ESPN and MTV for example, targeted special interest groups such as sports enthusiasts and teenagers. In short, cable became a more marketable service after satellites were introduced, and the growth of cable television accelerated.

The extensive cable satellite system also attracted more advertisers because it allowed for a larger audience base. Using satellite technology, for example, Ted Turner was able to expand his local television broadcasting station into a national cable network and thus sell advertising at more lucrative rates. In 1975, WTBS became the first satellite-delivered broadcast station and soon became known as the first "superstation."[39]

Table 6 Cable industry concentration ratios, 1990–97

[In percent]

Ranking	Market share			
	1990	1992	1994	1997
Top company	24.0	25.2	24.8	29.3
Top 2 companies	36.7	37.9	37.3	47.7
Top 3 companies	42.0	43.2	42.4	55.6
Top 4 companies	45.6	48.2	47.2	62.3
Top 10 companies	61.6	64.6	63.3	79.8

SOURCE: Paul Kagan Associates, Inc., cited in *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming: Fourth Annual Report*, FCC 97–423 (Federal Communications Commission, January 2000), p. E-4.

Today, superstation TBS has about 75 million subscribers and roughly 12,000 affiliates nationwide.[40]

Rising demand for television entertainment, marketing efforts, and technological innovations furthered the growth of cable television in the 1970s and early 1980s. HBO became the nation's first pay television network and created the first television production originated by a cable company. Their parent company, Time Inc., invested in motion picture production to differentiate Home Box Office as a premium channel and to improve the quality and quantity of movies available on HBO.[41] The Cable News Network (CNN) became the first all-news cable channel, when it began satellite service in 1980.[42] More variety and better services meant more revenue for cable firms, which in turn meant more growth for the industry. With satellite technology firmly entrenched, the number of cable systems had grown to 6,200 by 1984. Cable networks, numbering only 4 in 1976, numbered 48 in 1984. (See table 5.)

Deregulation and consolidation, 1984–99

Key legal aspects of the cable television industry were clarified when Congress enacted the Cable Communications Policy Act of 1984, which deregulated the industry further and reversed many of the restrictions from 1972. The purpose of the 1984 Cable Act was to streamline the expansion of cable systems and promote competition.[43] After some consideration, the FCC concluded that less cable regulation was needed. Specifically, the Commission no longer regulated cable rates in markets where sufficient competition existed, but cross-ownership of a cable and broadcast system was disallowed.[44] The FCC contended that as cable service grew, rates charged to customers would be checked by competition from developing video delivery alternatives, such as home satellites and videocassette rentals.

The 1980s were characterized by increased competition between television broadcasters and cable operators. Meanwhile, decreased viewing time for all forms of television further complicated the issue.[45] Among other things, videocassette recorders (VCRs) reduced time spent watching cable and broadcast television—the number of VCRs in use increased from 15.5 million in 1984 to 170.3 million in 1998.[46] In addition, new alternatives to cable and television broadcasting, such as home satellites, struggled to make their way into the video market.[47] Despite the move toward other viewing options, basic cable networks still managed to gain ground relative to over-the-air television broadcasters.[48] (See chart 4.)

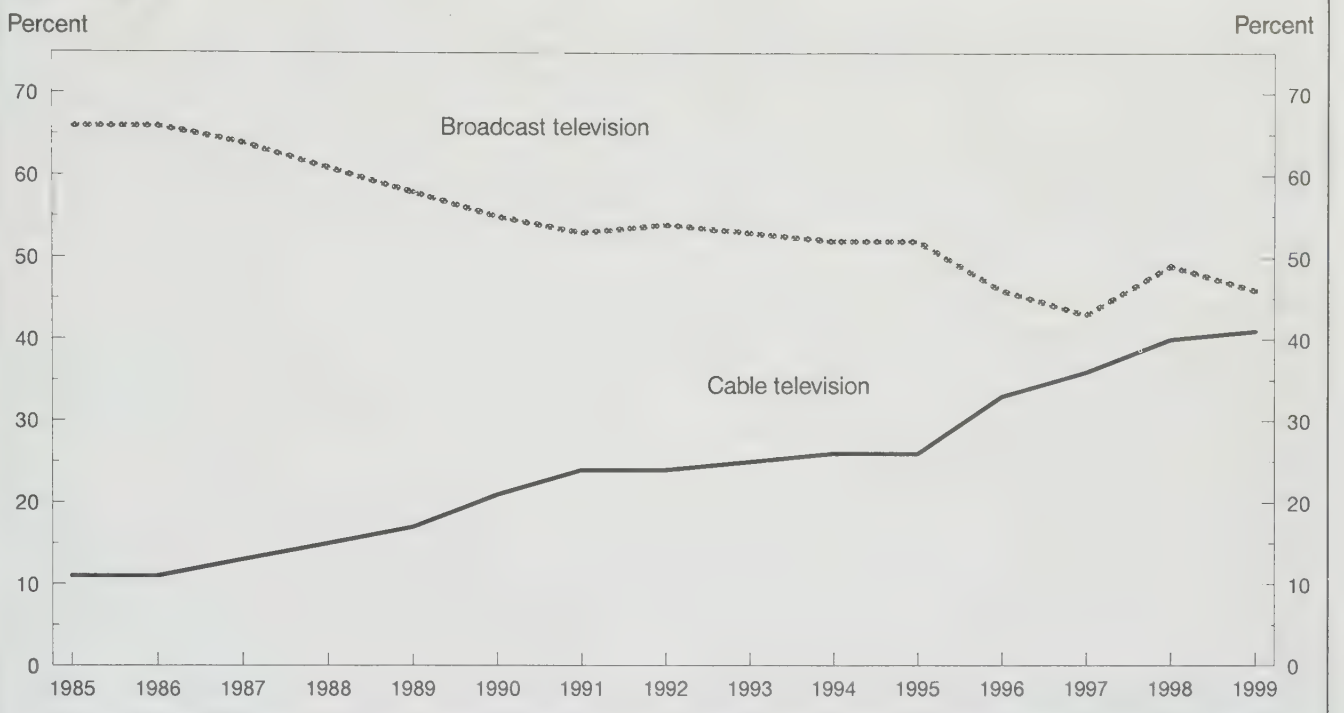
In the 1990s, cable system ownership became more concentrated, due to the many mergers and acquisitions that took place during the period, and this activity tended to dampen growth, especially that of employment. Time Warner, for example, merged with Turner Broadcasting Systems in 1996.[49] On the programming side, the Walt Disney Company acquired Capital Cities/ABC and Westinghouse bought CBS.[50] In 1975, the top 10 cable companies supplied 40 percent of all cable television subscribers.[51] According to a later source of industry concentration data, by 1997, the market share of the top 10 cable companies had doubled to 80 percent. (See table 6.) Also, in 1992, multiple cable system operators owned all or part of 15 of the 25 largest cable networks.[52]

In response to the accumulated market power of cable television operators, Congress enacted the Cable Television Consumer Protection and Competition Act of 1992. More restrictive measures were implemented in the following years and included rate regulation in the absence of effective competition, the prohibition of exclusive franchising, and must-carry rules, which obligated cable operators to carry all available local broadcast signals.[53]

Technological advances. While competition from other video viewing options served to slow growth, technological innovation continued to play a large role in the maturation and competitive status of the cable television industry. *Fiber optics*, a key breakthrough that took place during the 1980s, enabled faster and better quality cable connections. Further technical improvements, such as *digital compression* technology, allowed more system capacity,[54] and numerous new cable channels, such as Disney, The Weather Channel, and Discovery, entered the market.[55]

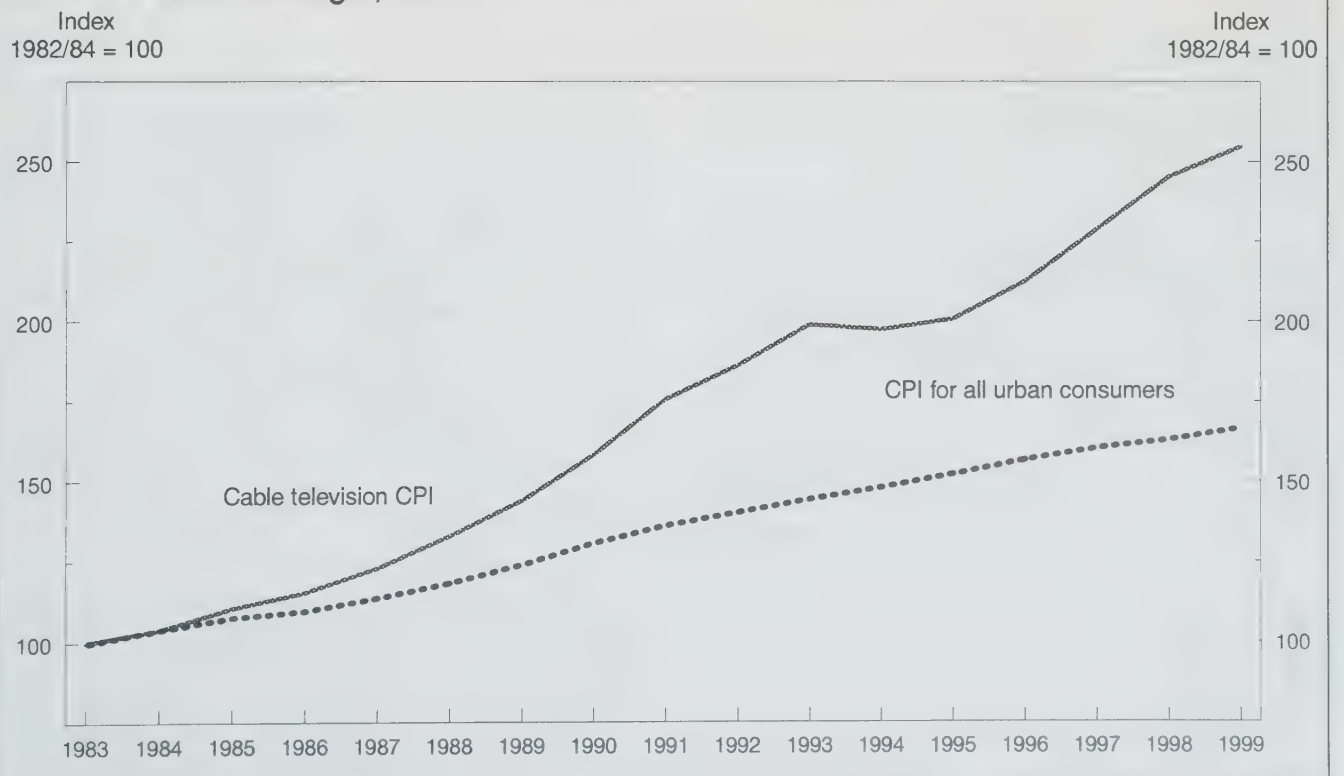
With the proliferation of cable television channels, over-the-air television audiences became more fragmented, and advertising revenues increasingly were diverted to cable. "Narrowcasting" allowed advertisers to target specific niche audiences that come with unique cable channels.[56] More than one-third of all television advertising dollars were directed toward cable audiences in 1997, compared with only 6 percent in 1984.[57] New products—such as NFL football on cable, "at-home" shopping, video-on-demand, and even the coverage of the Gulf War by CNN—served to increase the popularity of cable among consumers as well.[58] The number of cable subscriptions continued to grow despite hikes in cable tele-

Chart 4. Television viewing shares: cable versus broadcast television, 1985–99



SOURCE: *Cable TV Facts 2000* (Cabletelevision Advertising Bureau, 2000), on the Internet at **http://www.cabletvadbureau.com** (visited July 2000).

Chart 5. Consumer Price Index (CPI) for cable television and for all urban consumers, annual averages, 1983–99



vision prices, which since the early 1980s have risen more than twice as rapidly as the Consumer Price Index for all Urban Consumers (CPI-U). (See chart 5.) Despite climbing programming costs—as cable networks began charging local systems for program content, whereas previously the networks had paid the local systems to get in their channel lineup—by the late 1980s, the revenue picture appeared to be quite rosy for the cable industry.[59]

Cable companies made use of their increased revenues by investing in plant and equipment, and in programming. From 1984 through 1992, the cable industry spent more than $15 billion on hardware.[60] Similarly, cable systems' programming expenditures rose more than 300 percent to $7.5 billion from 1984 to 1998.[61] These investments improved the competitive position of cable relative to that of broadcasters.

Following the 1992 legislation, and as the U.S. economy began recovering from the 1990–91 recession, the trend in video delivery programming began to change once again. This time the move was from "cable" to "other" in the cable and other pay television industry. Like the first cable television customers who were out of reach from a strong broadcast television signal, direct-to-home satellite services initially served viewers who were not able to receive cable television services from an operator in their geographic area.

Similarly, the technological and market history tended to repeat itself as direct-to-home satellite service customers soon enjoyed better picture quality and more channels than cable or broadcasters offered. These new services also developed a technological advantage in the form of digital television service.[62] Just as cable accompanied the development of television broadcasting, the same held for satellites with respect to cable television's growth. In both cases, the older industry was at first helped by the new technology, only to later find itself in direct competition with the younger form of video distribution.

The Telecommunications Act of 1996. The television industry was further deregulated when Congress passed the Telecommunications Act of 1996, which was intended to provide a "pro-competitive national policy framework."[63] The act also sought to remove additional barriers to competitive entry in order to expedite competition with other multi-channel video programming deliverers.

Cable rates were deregulated on their extended basic tier, which included specialty channels such as ESPN, MTV, and TNT. The rates were no longer regulated if a telephone company, for example, offered cable service comparable to those of the competing cable system.[64] Finally, the FCC was given the authority to suspend its rules on a short-term basis in order to promote new or improved technology or services.[65] This opening to more competition and better technology proved to be a double-edged sword for cable companies in the 1990s. Direct Broadcast Satellite, for example, began to move into both cable and television broadcasting stations markets.

Information and entertainment. Industry classifications separating the delivery of information from that of entertainment became blurred in recent years, creating a new kind of video product, sometimes called *infotainment.* Firms began "bundling" their services—a single company might offer cable television, local and long-distance phone service, and Internet access, for example. These "full-service" telecommunications enterprises are expected to become increasingly prevalent, as technology continues to improve with the change from analog to digital distribution.[66] Cable television providers expanded their services by offering quicker access to the Internet, using high speed cable modems rather than regular telephone lines. Similarly, television broadcasting companies improved their strategic position by investing in cable networks, such as when the National Broadcasting Company and Microsoft began MSNBC, a 24-hour cable news network.[67] In addition, the satellite market was attractive enough that AT&T purchased a 2.5-percent equity stake in DirecTV in 1996.[68]

Many cable firms reacted by offering new channels and better service as a direct result of new competition from satellite television providers. Cable was able to increase its programming services by enabling *digital compression* technology for the first time. The technological cycle had come full circle: Satellites or other pay television services were able to offer better picture quality and increased channel capacity, just as cable services had enjoyed an advantage over broadcast television in the early years of the industry.

EMPLOYMENT IN THE TELEVISION INDUSTRY has grown immensely since 1958, with radio and television broadcasting leading the way up to 1972, and pay television and other communications adding more jobs since then. The latter industry, however, currently still trails slightly in terms of the total number of workers. Looking at the more specific industry data available since 1988, job creation in cable and other pay television services has outpaced that of television broadcasting. Although the two industries had similar employment levels in 1988, cable had added 52 percent more jobs than broadcast television by 1999. Workers in cable and other pay television services earn less per hour than their broadcast television counterparts, but they also tend to work more hours per week. The occupational make-up of the two industries is quite different, with installers and repairers leading the list for pay television, while announcers make up the leading occupation in radio and television broadcasting.

For more than 40 years, the employment and market trends in broadcast and cable television have gone through unique phases, as both industries matured at different times. Cable television began as a rural-based supplement to broadcast television, but increased demand and technological innovations spurred tremendous growth in the industry. Legislation and regulation in the industry both checked and boosted cable television

expansion. The establishment of a national cable and satellite distribution network followed the relaxation of some of the more restrictive policies. Technical advantages enabled cable to eventually exercise a certain degree of market power over broadcast television in their respective geographic markets.

As cable systems improved their market positions, they responded by upgrading their infrastructure and improving their service levels, channel capacity, and reception quality. Strong job growth continued. Meanwhile, competition from telephone companies, utilities, wireless industries, and home satellites began to provide rivalry in the market for video program delivery, as these related industries crossed over or entered into pay television. Today, cable, broadcast, and other television services continue to both influence and adapt to the rapidly changing world of telecommunications. If technology keeps pace with demand, employment in the industry should continue to expand as well.[69] □

Notes

[1] Robert L. Hilliard and Michael C. Keith, *The Broadcast Century: A Biography of American Broadcasting* (Stoneham, MA, Butterworth-Heinemann, 1992), p. 88.

[2] Hilliard and Keith, *The Broadcast Century*, p. 150.

[3] *Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming: Sixth Annual Report*, FCC 99–418 (Federal Communications Commission, January 2000), appendix B, table B-1.

[4] See *Federal Communications Commission Fact Sheet: Cable Television Information Bulletin*, June 2000, on the Internet at **http:www.fcc.gov/csb/facts/csgen.html** (visited July 2000), pp. 1–2.

[5] *Federal Communications Commission Fact Sheet: Cable Television*, p. 2.

[6] *Standard Industrial Classification Manual: 1987* (Executive Office of the President, Office of Management and Budget, 1987), p. 283.

[7] *Standard Industrial Classification Manual: 1987*, p. 283.

[8] These data are from the BLS Occupational Employment Statistics (OES) survey, "a periodic mail survey of nonfarm establishments that collects occupational employment data on workers by industry;" see *BLS Handbook of Methods*, bulletin 2490 (Bureau of Labor Statistics, April 1997), ch. 3, pp. 32–35.

[9] Average hourly earnings data are from the Current Employment Statistics (CES) Program. Average hourly earnings are gross payrolls (including premium pay such as overtime) divided by total paid hours. Therefore, average hourly earnings differ from wage rates, which are the payments for a unit of time worked. Retroactive payments, irregular bonuses, and benefits are excluded. The data are for nonsupervisory workers only.

[10] For more information on the CES, see "Employment, hours, and earnings from the establishment survey," in *BLS Handbook of Methods*, bulletin 2490 (Bureau of Labor Statistics, April 1997), ch. 2, pp. 15–31. From the *Handbook* (p. 15): "BLS cooperates with State employment security agencies in the Current Employment Statistics (CES) survey to collect data each month on employment, hours, and earnings from a sample of nonfarm establishments (including government). In early 1996, this sample included over 390,000 reporting units. From these data, a large number of employment, hours, and earnings series in considerable industry and geographic detail are prepared and published each month [by BLS]."

[11] The industry group "cable and other pay television services" was not classified independently until 1987, when the SIC system was revised with the publication of the new *Standard Industrial Classification Manual: 1987*.

[12] Other pay-TV services include, but are not limited to, closed circuit television, multichannel multipoint distribution systems, satellite master antenna systems, direct broadcast satellite, and other home satellite dishes.

[13] *Federal Communications Commission Fact Sheet: Cable Television*, p. 2.

[14] *Ibid.*, p. 2.

[15] Patrick R. Parsons and Robert M. Frieden, *The Cable and Satellite Television Industries* (Needham Heights, MA, Allyn and Bacon, 1998), p. 56.

[16] *Federal Communications Commission Fact Sheet: Cable Television*, p. 2.

[17] *Ibid.*, p. 2; where it also says that "The 1984 Cable Act established policies in the areas of ownership, channel usage, franchise provisions and renewals, subscriber rates and privacy, obscenity and lockboxes, unauthorized reception of services, equal employment opportunity, and pole attachments. The new law also defined jurisdictional boundaries among Federal, State and local authorities for regulating cable television systems."

[18] *Television and Cable Factbook* (Washington, DC, Warren Publishing, Inc., 1999), p. J-96.

[19] *Television and Cable Factbook*, p. J-97.

[20] Paul Kagan Associates, Inc., cited in *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming: Fourth Annual Report*, FCC 97–423 (Federal Communications Commission, January 2000), p. E-4.

[21] *Television and Cable Factbook*, p. J-97.

[22] National Cable Television Association, *The History of Cable Television* information sheet, on the Internet at **www.ncta.com/glance.html** (visited July 2000).

[23] Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 33.

[24] Robert W. Crandall and Harold Furchtgott-Roth, *Cable TV: Regulation or Competition?* (Washington, DC, The Brookings Institution, 1996), pp. 2–3.

[25] Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 20.

[26] Hilliard and Keith, *The Broadcast Century*, p. 92.

[27] Douglas F. Greer, *Industrial Organization and Public Policy*, 2nd ed. (New York, NY, Macmillan Publishing Company, 1984). p. 436.

[28] Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 27.

[29] *Ibid.*, p. 38.

[30] *Ibid.*, p. 36.

[31] *Inquiry into the Impact of Community Antenna Systems*, quoted at The National Cable Television Center and Museum website, on the Internet at **http://www.cablecenter.org** (visited August 1999).

[32] Parsons and Frieden, *The Cable and Satellite Television Industries*, pp. 42–43.

[33] *Ibid.*, p. 44.

[34] Greer, *Industrial Organization and Public Policy*, pp. 434–35.

[35] Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 45.

[36] From *Television Magazine*, March 1967, cited in Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 47.

[37] Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 49.

[38] *Ibid.*, pp. 53–54.

[39] *Ibid.*, pp. 53–55.

[40] *Cable TV Developments* (National Cable Television Association), fall 1998/ winter 1999.

[41] The National Cable Television Center and Museum website, on the Internet at **http://www.cablecenter.org** (visited August 1998).

[42] Hilliard and Keith, *The Broadcast Century*, p. 230.

[43] *Cable Communications Policy Act of 1984*, Public Law 98-549, 98th Congress, Sec 601, Title VI, Part I, General Provisions, Purposes, 47 USC 521.

[44] *Cable Communications Policy Act of 1984*, Sec 623, 622, 613, and 634.

[45] J. Fred MacDonald, *One Nation Under Television* (New York, NY, Pantheon Books, 1990). p. 258.

[46] *Television and Cable Factbook*, 1999, p. J–3.

[47] Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 60.

[48] Nielsen ratings, cited in *Cable TV Developments* (National Cable Television Association), spring/summer 2000, p. 5.

[49] Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 16.

[50] James Walker and Douglas Ferguson, *The Broadcast Television Industry*, (Needham Heights, MA, Allyn and Bacon, 1998). p.37.

[51] Crandall and Furchtgott-Roth, p. 9.

[52] Crandall and Furchtgott-Roth. p. 15.

[53] Cable Television Consumer Protection and Competition Act of 1992, Public Law 102–385, 102nd Congress, Oct. 5, 1992.

[54] The National Cable Television Center and Museum website, on the Internet at **http://www.cablecenter.org** (visited August 1998).

[55] *Communications Engineering and Design* (CED) magazine website, on the Internet at **http://www.cedmagazine.com/retro/eighties.html** (visited June 1998).

[56] MacDonald, *One Nation Under Television*, p. 254.

[57] *Television and Cable Factbook*, p. J-12.

[58] The National Cable Television Center and Museum, on the Internet at **http://www.cablecenter.org** (visited, August 1998).

[59] *Cable TV Developments* (National Cable Television Association), fall, 1997, p. 8.

[60] National Cable Television Association information sheet on the 1980s.

[61] *Cable TV Developments* (National Cable Television Association), fall 1998/ winter 1999.

[62] Parsons and Frieden, *The Cable and Satellite Television Industries*, p.14.

[63] *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming: Third Annual Report*, CS Docket No. 96–133 (Federal Communications Commission, January 1997), sec. 2, par. 5.

[64] *Telecommunications Act of 1996*, 104th Congress, Jan. 3, 1996, S.652, section 301.

[65] *Telecommunications Act of 1996*, 104th Congress, Jan. 3, 1996, S.652, section 303.

[66] Parsons and Frieden, *The Cable and Satellite Television Industries*, p.12.

[67] The National Cable Television Center and Museum web site: **http:// www.cablecenter.org** (visited August 1998).

[68] Parsons and Frieden, *The Cable and Satellite Television Industries*, p. 134.

[69] A discussion of the outlook for jobs in both the broadcast and cable television industries can be found in *Career Guide to Industries: 2001–01 Edition*, Bulletin 2340 (Bureau of Labor Statistics, January 2000), pp. 105–09.

Rising producer prices in 1999 dominated by energy goods

Surging energy prices push up the Producer Price Index for crude, intermediate, and finished goods

Eleni Xenofondos
and
William F. Snyders

The Producer Price Index (PPI) for crude, intermediate, and finished goods rose in 1999; surging energy prices were the driving force behind the acceleration in each stage of process. The Producer Price Index for Finished Goods rose 2.9 percent in 1999, after showing no change in 1998, and falling 1.2 percent in 1997. The rise in 1999 was the largest annual increase since 1990's 5.7-percent advance. The turnaround in overall finished goods was primarily due to soaring energy prices, which increased 18.1 percent, following an 11.7-percent decrease during the previous 12 months. The index for finished consumer foods rose 0.8 percent in 1999, after a slight 0.1-percent increase in 1998. However, finished goods other than foods and energy—a category that includes both consumer goods and capital equipment—increased 0.9 percent in 1999, after gaining 2.5 percent a year earlier. (See table 1.)

At the earlier stages of processing, the Producer Price Index for intermediate materials, supplies, and components rose 3.7 percent, following a 3.3-percent decline in 1998. This index captures price movements for goods such as jet fuel, paint materials, shipping containers, animal feeds, and semiconductors. The overall acceleration in intermediate materials was primarily due to rising prices for intermediate energy goods, which declined in 1998. Also contributing to the acceleration were rising prices for both nondurable and durable manufacturing materials, both of which fell last year. The index for materials and components for construction rose more than in the prior year. Prices for intermediate foods and feeds decreased less than in 1998. The intermediate core index (which excludes foods and energy) increased 1.9 percent, following a 1.6-percent decline in 1998.

Similarly, prices for crude materials for further processing advanced 15.3 percent in 1999, after falling 16.7 percent in 1998. Crude goods include commodities such as wheat, slaughter cattle, crude petroleum, natural gas, scrap metals, timber, and raw cotton. Analogous to finished and intermediate goods, most of the increase in crude goods can be attributed to rising prices for energy goods, which dropped in the previous year. Prices for crude goods other than foods and energy also increased substantially from last year. The index for crude foodstuffs and feedstuffs fell less than it did in 1998.

Inflation, as measured by the Consumer Price Index (CPI), rose 2.7 percent during 1999, accelerating from the 1.6-percent increase in 1998. As with the PPI, much of the CPI's overall increase can be attributed to rising energy prices—gasoline prices paid by consumers rose 30.1 percent in 1999. However, excluding food and energy goods, consumer prices advanced only 1.9 percent, the slowest annual rate of increase in nearly 35 years.[1]

Energy goods

The PPI for finished energy goods advanced 18.1 percent, following an 11.7-percent drop in 1998. Taking a look further up the pipeline for energy

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Table 1. Annual percent changes for major categories of the Producer Price Index by stage of processing, 1990–99

Index	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Finished goods	5.7	–0.1	1.6	0.2	1.7	2.3	2.8	–1.2	0.0	2.9
Foods	2.6	–1.5	1.6	2.4	1.1	1.9	3.4	–.8	.1	.8
Energy	30.7	–9.6	–.3	–4.1	3.5	1.1	11.7	–6.4	–11.7	18.1
Other	3.5	3.1	2.0	.4	1.6	2.6	.6	.0	2.5	.9
Intermediate materials, supplies, and components	4.3	–2.6	1.0	1.0	4.4	3.3	.7	–.8	–3.3	3.7
Foods and feeds	–1.3	–.2	–.5	5.5	–4.5	10.3	2.1	–1.7	–7.3	–4.2
Energy	21.8	–11.6	.7	–4.2	2.9	1.1	11.2	–7.0	–12.1	19.6
Other	1.9	–.8	1.2	1.6	5.2	3.2	–.9	.3	–1.6	1.9
Crude materials for further processing	6.0	–11.6	3.3	.1	–.5	5.5	14.7	–11.3	–16.7	15.3
Foodstuffs and feedstuffs	–4.2	–5.8	3.0	7.2	-9.4	12.9	–1.0	-4.0	–11.0	–.1
Energy	19.1	–16.6	2.3	–12.3	–.1	3.7	51.2	–23.1	–23.8	36.9
Other	.6	–7.6	5.7	10.7	17.3	-4.2	–5.5	.0	–16.0	14.0

goods, prices for intermediate energy goods advanced 19.6 percent in 1999, following a 12.1-percent drop in the 1998 calendar year. Also, the PPI for crude energy materials rose 36.9 percent in 1999, following a 23.8-percent drop in 1998. While most energy products accelerated during 1999, each stage of process was driven by accelerating prices for petroleum-based commodities.

Petroleum-based energy goods. Crude petroleum accounted for three-fourths of the acceleration in crude energy materials. In 1998, petroleum prices reached near-historic lows as world production increased 1.4 percent, petroleum demand from East Asia waned, and a warmer-than-normal 1997–98 winter season decreased energy demand in the United States.[2] Crude petroleum prices, however, took a new direction in 1999 due to several factors that combined to push up oil prices by 172.0 percent. First, domestic crude oil production fell from 228.1 million barrels in 1998 to 214.6 million barrels in 1999, a decline of nearly 6.0 percent. This slowdown in production can be traced to a 10.6-percent drop in Alaskan crude oil output as well as a 4.8-percent decrease from the lower 48 States.[3]

In March 1999, the Organization of Petroleum Exporting Countries (OPEC) and several non-OPEC countries announced an agreement to reduce output. As a result, crude oil imports from some nations to the United States dropped significantly. (See table 2.)

Other worldwide events also affected domestic oil prices in the United States. During most of the 1990s, the Far East enjoyed rapid economic expansion and the commensurate expanding demand for energy. However, in 1998, Japan's economic growth rate fell 2.9 percent, real gross domestic product (GDP) in Thailand dropped 8.1 percent, and the growth rate in South Korea fell 5.8 percent.[4] Economic slumps in these and other Asian countries caused oil demand for industrial and other uses to decline. In 1999, these economies began to recover. Real GDP rebounded, and competition for available crude oil supplies increased.

Petroleum-based products also led to the acceleration at the intermediate stage of process. (Approximately two-thirds of the acceleration in intermediate energy goods can be attributed to petroleum-based energy products.) Jet fuel prices surged 90.9 percent from December 1998 to December 1999, after falling for 2 consecutive years. The indexes for diesel fuel, liquefied petroleum gas, and residual fuel also rose in 1999, following a decrease in the prior year.

More than half of the acceleration in prices for finished energy goods can be traced to a 74.8-percent surge in gasoline prices, which followed a 33.1-percent drop in 1998. Chart 1 illustrates the strong correlation in the price movements among crude petroleum and gasoline. Excluding gasoline, a more detailed look shows that the index for finished goods increased 1.3 percent in 1999, compared with the 2.9-percent gain in the overall index. Weather-related supply issues put upward pressure on gasoline prices as Hurricane Lenny forced the closing of refinery operations in the Caribbean. Also, refinery operations in Mississippi temporarily closed for maintenance. Among other petroleum-based energy goods, prices for home heating oil jumped 89.4 percent, following a 36.1-percent decline in 1998. The indexes for finished lubricants and liquefied petroleum gas also increased in 1999. (See table 3.)

Energy goods other than petroleum-based. Among other finished energy goods in 1999, electricity production declined as cooler weather in some parts of the country substantially reduced the need for air conditioning, keeping residential electric power prices low. (The residential electric power index was the only finished energy component that fell in 1999.) In addition, with no significant generation outages in 1999, the wholesale supply of electricity was more than sufficient.

Table 2. Imports of crude oil into the United States by country of origin, 1998–99

Country of origin	Crude oil (thousand barrels)		Percent change
	1998	1999	
Arab OPEC			
Qatar	504	332	–34.1
Kuwait	109,412	89,914	–17.8
Saudi Arabia	512,452	506,272	–1.2
Other OPEC			
Venezuela	502,552	419,893	–16.4
Nigeria	251,315	227,471	–9.5
Non-OPEC			
Congo (Kinshasa)	6,219	900	–85.5
Yemen	1,628	335	–79.4
China, People's Republic of	15,376	4,763	–69.0
Peru	14,908	9,227	–38.1
Trinidad and Tobago	19,423	14,748	–24.1
Angola	169,580	130,168	–23.2
Gabon	75,543	61,247	–18.9
Malaysia	9,375	7,708	–17.8
Congo (Brazzaville)	19,527	16,645	–14.8
Guatemala	8,311	7,632	–8.2
Mexico	482,252	457,655	–5.1

SOURCE: *Petroleum Supply Annual, 1999, Volume I* (Energy Information Administration). See text footnote 3 for Internet address.

Prices for residential natural gas increased, after falling in the previous year.

Further up the energy pipeline, prices rose for commercial electric power, industrial natural gas, and commercial natural gas, after falling in 1998. The index for industrial electric power fell less in 1999 than in the prior year. By contrast, prices for coke oven products declined 5.4 percent in 1999, after edging up 0.1 percent in the prior year.

At the crude stage of process, the index for natural gas rose 7.9 percent, following a 17.8-percent drop in 1998. By contrast, coal prices fell 9.3 percent, following a 1.2-percent decrease in the previous year. Following crude oil, natural gas and coal are the largest fuel sources used in the United States, each supplying 23.0 percent of U.S. consumption.[5]

In 1999, natural gas prices increased mainly due to summer cooling needs, anticipation of decreased injection rates, ensuing decreased winter storage levels, and decreased drilling activity. Hot weather in California and the Southwest caused a higher-than-normal demand for air conditioning. Higher energy prices and demand in 1999 also resulted from the temporary closings of hydroelectric power plants in the Northwest and West, due to the dams' harmful environmental effects on some species of fish and birds. At the same time, a maintenance shutdown of California's main north-south transmission line caused a decrease in supply.

Foods and related products

Producer prices for finished consumer foods accelerated in 1999, rising 0.8 percent, after a 0.1-percent increase in 1998. Leading the way, pork prices jumped 29.8 percent, following a 27.3-percent drop in 1998 and a 13.6-percent decline in 1997. Declining pork prices in 1998 resulted from overproduction, softer exports to Asia and Mexico, and price competition from Canadian imports. The rebound in pork prices for 1999 can be traced to a dramatic 266.9-percent jump in the index for slaughter hogs. In addition, greater demand for U.S. pork exports in 1999 pushed prices higher. (See table 4.)

Also contributing to the increase in finished consumer foods was a 10.8-percent rise in beef and veal prices, which had declined 2.7 percent in 1998. Beef prices were very strong in the second half of 1999 in spite of record beef production and large supplies of pork and poultry. Demand for higher quality beef was unusually strong as U.S. and world economies continued to strengthen, particularly in Asia. In addition, expectations for a more festive holiday season bolstered demand for higher quality beef to insure adequate supplies.

In contrast to rising meat prices, the dairy products index fell 11.1 percent in 1999, following a 10.7-percent gain in the prior year. Due to cold and dry weather throughout most of 1997 and 1998, milk production fell, and dairy prices gradually rose. During the same period, skyrocketing butter demand also pushed prices upward. However, prices for dairy products fell beginning in the first quarter of 1999 due to decreased demand and increased production levels. For the 1999 calendar year, prices declined for fluid milk products, butter, cheese, and ice cream and frozen desserts.

Among other finished consumer foods, prices rose for fresh fruits and melons, and for finfish and shellfish, after falling in the previous year. In contrast, the indexes for processed young chickens and for shortening and cooking oils declined in 1999, after increasing in 1998.

At the earlier stages of processing, prices for intermediate foods and feeds declined 4.2 percent throughout 1999, following a 7.3-percent drop in 1998. The index for prepared animal feeds fell 2.7 percent, after dropping 20.4 percent in the prior year. Crude vegetable oil prices declined due to decreasing crude input prices of corn and soybeans. The index for crude foodstuffs and feedstuffs edged down 0.1 percent in 1999, following an 11.0-percent drop during the 1998 calendar year. Slaughter cattle prices rose 19.4 percent, after falling 12.0 percent a year ago. Similarly, a large upturn for slaughter hog prices was posted in 1999. The indexes for corn and alfalfa hay fell less than in the previous year. Conversely, fluid milk prices declined 31.3 percent in 1999, after advancing 25.6 percent in 1998. The index for slaughter broilers and fryers also declined, following an increase in the prior year.

Chart 1. PPI for crude petroleum and gasoline, 1973–99

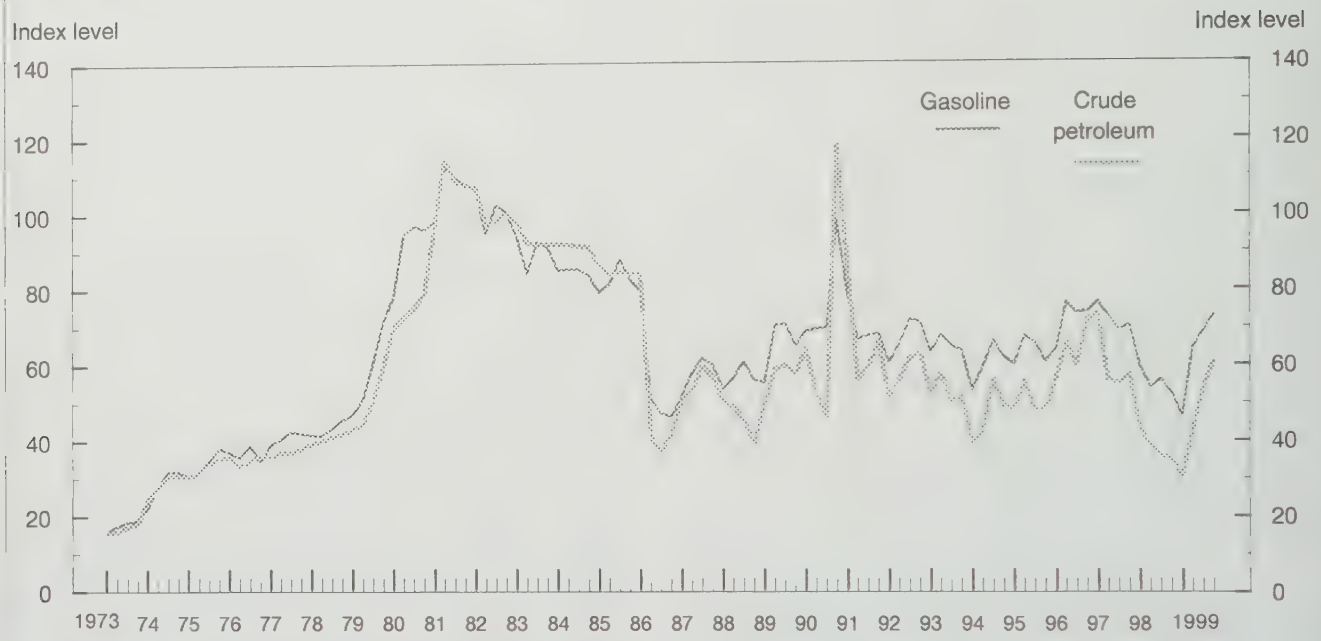

Chart 2. Key commodity impacts to finished goods less foods and energy

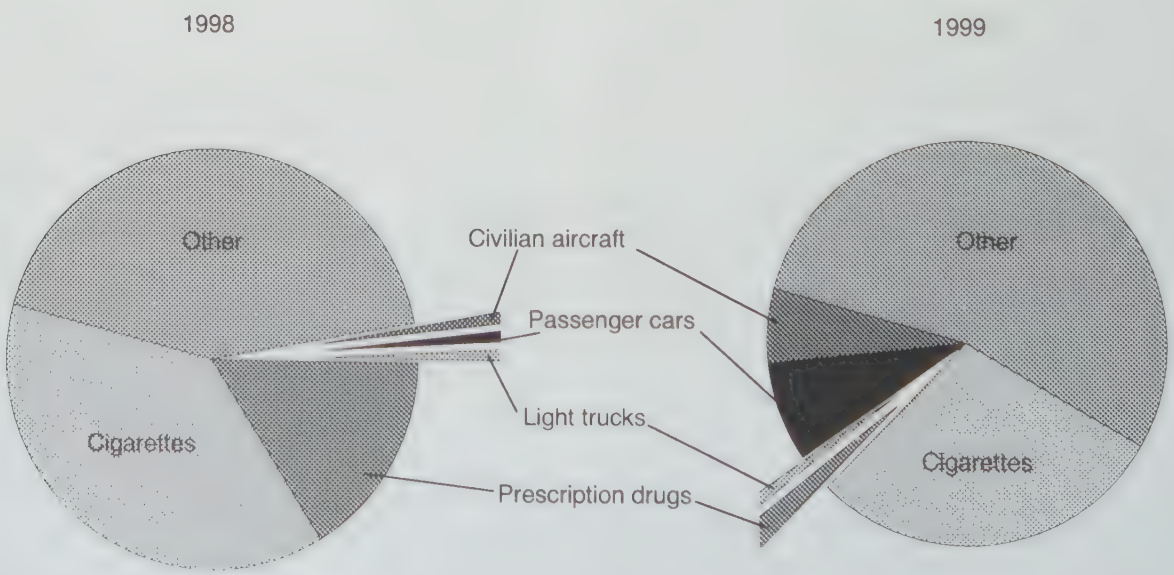

Table 3. Annual percent changes in Producer Price Indexes for selected energy items, 1994–99

Index	1994	1995	1996	1997	1998	1999
Finished energy goods	3.5	1.1	11.7	–6.4	–11.7	18.1
Gasoline	11.2	2.4	27.1	–15.0	–33.1	74.8
Home heating oil	6.9	11.9	25.0	–21.7	–36.1	89.4
Residential electric power	1.5	.9	.6	–.2	–2.5	–.5
Residential natural gas	–2.6	–2.4	11.2	2.4	–2.4	.9
Intermediate energy goods	2.9	1.1	11.2	–7.0	–12.1	19.6
Natural gas to electric utilities	3.4	–1.4	6.1	9.3	–24.3	15.6
Diesel fuels	5.9	11.1	26.2	–22.5	–33.8	86.4
Jet fuels	4.3	6.1	26.1	–22.3	–35.8	90.9
Commercial electric power	2.3	.6	–.1	.0	–1.8	.6
Liquefied petroleum gas	13.0	3.9	71.4	–29.3	–32.6	87.0
Residual fuels	10.2	–4.7	32.8	–7.6	–39.8	91.1
Crude energy materials	–.1	3.7	51.2	–23.1	–23.8	36.9
Natural gas	–14.0	–.3	92.0	–27.9	–17.8	7.9
Crude petroleum	21.1	10.8	35.8	–28.3	–48.6	172.0
Coal	–2.1	–.8	–1.1	4.9	–1.2	–9.3

Finished goods other than foods and energy

The index for finished goods other than foods and energy increased 0.9 percent, after advancing 2.5 percent in 1998. Finished consumer goods less foods and energy increased 1.2 percent, following a 4.2-percent gain in 1998. (See table 5.) By contrast, the index for capital equipment rose 0.3 percent in 1999, after showing no change a year earlier. Chart 2 illustrates the key commodities contributing to the rise in finished goods less foods and energy in 1998 and 1999.

Most of the deceleration in finished consumer goods other than foods and energy was due to much lower price increases for cigarettes and prescription drugs. The cigarette index rose 9.6 percent in 1999, after jumping 49.4 percent in 1998, and prescription drug prices increased 0.8 percent, after gaining 20.9 percent a year ago.

Cigarette prices were idle for most of 1999 with the exception of a 9.5-percent increase in September 1999. Tobacco manufacturers raised the per-pack price of cigarettes by 18 cents to help pay a $206 billion legal settlement. The settlement also crippled the tobacco industry's ability to market products by limiting advertisement locations. As a result of the price increase and better awareness of the ill effects of smoking, cigarette sales fell during most of 1999.

In spite of double-digit growth in sales for prescription drugs in 1999, price increases slowed dramatically, up only 0.8 percent, following a 20.9-percent hike in 1998. This deceleration was led by smaller price increases for minor tranquilizers, diuretics, cough and cold preparations, vitamins, and diabetes therapy drugs. The indexes for antispasmodic, cardiovascular therapy, and sedatives declined, after rising in 1998. However, price increases for systemic anti-infectives, hormones, and dermatologicals accelerated in 1999. The index for anti-arthritics rose, after falling in the prior year.

Prices for other finished goods less foods and energy decelerated in 1999. Price increases slowed for light motor trucks, book publishing, alcoholic beverages, periodical circulation, and household furniture. The indexes for men's and boys' apparel and for sporting and athletic goods declined, after rising in 1998. Conversely, prices rose more in 1999 than in the prior year for passenger cars, mobile homes, and newspaper circulation.

Strong economic growth and a low unemployment rate helped raise sales of new cars by 6.8 percent in 1999. Passenger car prices rose 1.2 percent in 1999, versus 0.5 percent in 1998. The 1999 passenger car index had the largest increase since a 1.7-percent rise in 1995. Domestic car production increased to 5.6 million units in 1999, after 4 consecutive years of decline.[6] Domestic car inventories were 1.3 million units at the end of 1999, the same as at the end of 1998.

Within capital equipment, prices increased 0.3 percent in 1999, after showing no change a year earlier. This slight acceleration was led by a 2.1-percent increase in civilian aircraft prices, following a 0.5-percent rise in 1998. The civilian aircraft index advanced due to cost increases for labor and materials. Price increases also accelerated for commercial furniture, transformers and power regulators, and for agricultural machinery and equipment. In contrast, price increases slowed for light motor trucks, heavy motor trucks, and industrial material handling equipment. The indexes for communication equipment and for x-ray and electromedical equipment fell more than in 1998.

The truck indexes increased at a slower rate in 1999 versus the prior year. Prices for light trucks rose 0.3 percent, after advancing 1.0 percent in the previous year. This slower rate of increase can be traced to the bigger incentive pro-

Table 4. Annual percent changes in Producer Price Indexes for selected food items, 1994–99

Index	1994	1995	1996	1997	1998	1999
Finished consumer foods	1.1	1.9	3.4	–0.8	0.1	0.8
Pork	–11.1	15.3	21.9	–13.6	–27.3	29.8
Dairy products	–2.0	5.4	2.4	4.7	10.7	–11.1
Fresh fruits and melons	–11.2	2.5	37.2	–8.2	–19.0	8.2
Fresh and dry vegetables	25.6	–36.0	–24.3	21.6	8.8	4.4
Roasted coffee	49.8	–8.2	–8.4	18.1	–9.5	–.9
Beef and veal	–4.8	–1.4	7.4	–5.4	–2.7	10.8
Processed poultry	–3.7	8.4	2.6	–6.3	3.8	–3.7
Intermediate foods and feeds	–4.5	10.3	2.1	–1.7	–7.3	–4.2
Prepared animal feeds	–10.6	20.6	5.4	–3.1	–20.4	–2.7
Crude vegetable oils	4.1	–14.1	–9.3	13.9	–2.7	–37.5
Flour	–1.1	20.1	–9.0	–8.2	–5.6	–7.5
Confectionery materials	2.2	1.5	2.2	–15.8	–1.0	1.7
Refined sugar	.8	.8	4.2	–4.5	.6	–2.2
Crude foodstuffs and feedstuffs	–9.4	12.9	–1.0	–4.0	–11.0	–.1
Slaughter hogs	–21.3	40.6	23.2	–21.7	–76.8	266.9
Soybeans	–18.1	26.7	–3.7	1.8	–21.3	–17.5
Wheat	–5.6	29.9	–19.3	–11.3	–15.0	–13.9
Corn	–22.4	49.4	–21.0	2.2	–22.5	–12.4
Fluid milk	–5.2	8.4	1.1	2.8	25.6	–31.3
Slaughter cattle	–5.3	–5.2	–2.5	2.0	–12.0	19.4

grams aimed at boosting sales on some models. The index for heavy trucks rose 1.4 percent, following a 3.9-percent gain in 1998. Sales of medium-duty trucks increased more than 20.0 percent in 1999, and heavy-duty truck sales were 25.4 percent above 1998 levels.

The index for electronic computers fell 19.7 percent in 1999. Quality improvement in CPUs, hard drives, and other computer components contributed to the falling prices of electronic computers. Improving technology and production processes continued to result in a better product for a lower price. In addition, price competition continued in all segments of the computer hardware industry.

Intermediate industrial materials

The PPI for intermediate materials less foods and energy rose 1.9 percent, after falling 1.6 percent in 1998. This upturn was mainly due to a 4.0-percent price increase for nondurable manufacturing materials, following a 5.3-percent decline in 1998. Durable manufacturing materials also rose, after falling in the prior year. The index for materials and components for construction rose at a higher rate in 1999 than in 1998. (See table 6.)

Within nondurable manufacturing materials, the indexes for plastic resins and materials and organic chemicals advanced due to significantly higher prices for crude petroleum in 1999. Prices for plastic resins and materials advanced 15.9 percent, after falling 13.4 percent in 1998. Similarly, the indexes for primary basic organic chemicals, paperboard, paper, and woodpulp rose, after declining in the prior year. For woodpulp—a material input to paper and paperboard production—rising prices were due to strong demand and lower inventories caused by the closure of several major woodpulp producers. Higher prices for paperboard in 1999 also resulted from supply interruptions caused by natural disasters such as Hurricane Floyd.

The inedible fats and oils index fell for the second consecutive year. This index is very sensitive to movements in grain prices and tends to be volatile; monthly price movements have ranged from a low of –20.4 percent (March 1999) to a high of +14.5 percent (October 1999). General weakness in global agricultural commodity prices is the key factor causing the year's downward movement.

The price movements of several commodities worked to dampen the overall acceleration within the nondurable manufacturing materials index in 1999. The phosphates index decreased 8.6 percent, after gaining 4.6 percent in 1998, and prices for alkalies and chlorine, gray fabrics, processed yarns and threads, and synthetic fibers fell more in 1999 than in the previous year.

The durable manufacturing materials index rose 2.4 percent during 1999, after posting a 5.5-percent decline in 1998. Prices for primary nonferrous metals (including copper and aluminum) rose 14.0 percent in 1999, following a 16.7-percent drop a year ago. Prices for these products rebounded due to strong demand from the automotive industry and the construction sector. The flat glass index fell less than in the previous year. Prices for steel mill products fell 2.4 percent, following a 6.5-percent decline in 1998. This slower rate of price decline may be attributed to falling import levels and some reduction in the large inventory of imported steel accumulated in 1998.

Table 5. Annual percent changes in Producer Price Indexes for selected finished goods other than foods and energy, 1994–99

Index	1994	1995	1996	1997	1998	1999
Finished goods other than foods and energy	1.6	2.6	0.6	0.0	2.5	0.9
Finished consumer goods less foods and energy	1.4	2.8	.8	.3	4.2	1.2
Passenger cars	2.1	1.7	–.8	–2.6	.5	1.2
Light trucks	3.3	1.5	.2	–3.6	1.0	.3
Prescription drugs	3.1	4.2	2.0	3.6	20.9	.8
Over-the-counter drugs	1.7	1.7	–1.7	.3	.0	.9
Cigarettes	–.1	3.7	3.3	10.0	49.4	9.6
Books	5.4	6.5	3.2	3.3	4.1	1.8
Periodicals	3.6	4.8	2.0	4.0	3.4	.7
Newspapers	3.3	8.8	4.2	.1	1.1	1.4
Household furniture	2.7	2.7	1.4	1.1	1.9	1.2
Capital equipment	2.0	2.2	.4	–.6	.0	.3
Heavy trucks	3.0	4.1	–4.5	.6	3.9	1.4
Truck trailers	7.7	2.2	–1.4	2.0	1.9	1.7
Civilian aircraft	2.5	6.1	3.2	.5	.5	2.1
Commercial furniture	2.5	3.4	2.0	1.2	.1	1.2
Transformers and power regulators	2.1	3.3	–1.0	.6	.1	3.0
Computers	–6.8	–12.7	–22.3	–21.6	–26.6	–19.7
Agricultural machinery	2.7	4.7	1.4	1.4	.7	1.3
Construction machinery	2.0	2.5	1.8	1.9	1.7	1.4

The index for materials and components for construction registered a 2.2-percent gain in 1999, after edging up only 0.1 percent during 1998. More than half of this acceleration was due to the index for softwood lumber's 10.1-percent rise in 1999, following a 10.1-percent decline last year. Softwood lumber prices rose steadily during the first half of 1999 (except for a slight drop in April) due to an active construction sector, then weakened after July. Prices for other commodities contributed to the acceleration in the construction materials index. Prices for plastic construction products and nonferrous wire and cable also rose, after falling in 1998, and the indexes for gypsum products and millwork rose more than in the previous year. By contrast, plywood prices fell 0.2 percent in 1999, following a 4.9-percent rise in 1998. The index for air conditioning and refrigeration equipment also fell, after increasing in the previous year. Cement prices rose less than in the prior calendar year.

Crude nonfood materials less energy

Prices for crude nonfood materials less energy rose 14.0 percent in 1999, after declining 16.0 percent in the prior calendar year. More than half of the acceleration in this index was due to price increases for iron and steel scrap and wastepaper. The index for iron and steel scrap rose 40.0 percent, following a 39.9-percent drop in the previous year. Domestic demand for iron and steel scrap in 1999 was strong, while Asian demand continued to rise. The wastepaper index jumped 110.5 percent, following a 28.9-percent fall in 1998. The rising prices for wastepaper in 1999 may be linked to increased paper production and increased usage of recycled materials in paper products. Upturns in the indexes for aluminum base scrap, copper ores, softwood logs, and copper base scrap also contributed to the price acceleration in basic industrial materials in 1999. By contrast, the index for raw cotton decreased 20.8 percent in 1999, after registering an 8.0-percent decline in 1998. Price increases for gold ores and phosphates declined from their 1998 increases. The index for pulpwood logs fell more than in the prior year, while prices for construction sand, gravel, and crushed stone rose less.

Selected service industries

Among the available PPI service industries, the rate of price increase received by physician offices slowed from 2.6 percent in 1998 to 2.1 percent in 1999. Because health insurance and managed care companies are benchmarking more of their price changes to medicare, the annual price movements in medicare treatments and non-medicare treatments are beginning to converge. In an effort to compete for managed care dollars, there was a growing trend toward consolidating practices to increase bargaining power. These physician networks bring together partners with management skills, managed care expertise, information systems, and capital. (See table 7.)

In 1999, the index for general medical and surgical hospitals rose at a somewhat faster rate—1.8 percent versus 1.3 percent in 1998. Prices received by psychiatric hospitals rose

Table 6. Annual percent changes in Producer Price Indexes for selected intermediate and crude materials other than foods and energy, 1994–99

Index	1994	1995	1996	1997	1998	1999
Intermediate goods other than foods and energy	5.2	3.2	–0.9	0.3	–1.6	1.9
Nondurable manufacturing materials	10.4	5.9	–3.3	.3	–5.3	4.0
Inedible fats and oils	48.0	–3.9	2.1	3.8	–22.8	–16.0
Woodpulp	38.1	40.7	–33.0	4.1	–12.5	12.1
Basic organic chemicals	15.7	.4	3.6	–1.7	–6.4	6.9
Plastic resins and materials	18.8	–4.3	4.2	-2.8	–13.4	15.9
Durable manufacturing materials	9.8	1.1	–1.4	.0	–5.5	2.4
Copper	68.2	—.1	–22.9	–22.8	–17.7	21.7
Aluminum	64.4	–7.3	–12.8	12.4	–17.5	16.0
Aluminum mill shapes	18.3	7.9	–7.9	6.8	–8.5	4.2
Flat glass	4.4	–.5	–1.5	–1.3	–1.6	–.3
Construction materials	3.9	1.9	1.8	1.2	.1	2.2
Gypsum products	30.8	1.0	6.6	7.1	7.3	23.1
Nonferrous wire and cable	13.8	1.6	–3.1	–2.2	–4.6	.3
Softwood lumber	–9.6	–10.3	19.6	–3.8	–10.1	10.1
Crude nonfood materials less energy	17.3	–4.2	–5.5	.0	–16.0	14.0
Wastepaper	179.6	–50.9	–1.3	11.6	–28.9	110.5
Nonferrous scrap	70.3	–10.3	–7.9	–.6	–24.8	25.6
Raw cotton	34.9	4.2	–13.0	–11.2	–8.0	–20.8
Sand and gravel	2.3	3.6	1.9	1.8	3.5	2.9

0.9 percent in 1999, after increasing 0.5 percent in 1998, while the index for specialty hospitals (except psychiatric) advanced 2.7 percent in 1999, following a 2.3-percent rise in the prior year. One factor behind these accelerations was the influence that health maintenance organizations (HMOs) exercised over service providers. In the past, pressures by managed care companies in the healthcare industry helped keep inflation to a minimum. However, further cost containment approaches are difficult to find. As a result, providers have been forced to increase prices as costs rise, leading to higher reimbursement rates.

The robust U.S. economy grew more than 4.0 percent during 1999 and coupled with higher fuel costs, permitted the distribution service industries to set higher prices. Of the 20 distribution service industries for which PPI publishes price indexes, all but three industries showed increased prices in 1999. This compares to 1998, when all but four industries raised prices. Freight transportation arrangement, freight transportation on the Great Lakes-St. Lawrence Seaway, and crude petroleum pipelines were the three industries with declining prices in 1999. A common theme among industries with increasing prices in 1999 was higher fuel prices.

The trucking (except local) index rose 3.4 percent for the second consecutive year. Petroleum, mostly in the form of motor fuels, is consumed primarily for transportation purposes. Crude prices have changed significantly over the past year with prices rising from $12 per barrel in mid-February 1999—representing the lowest prices in nominal terms since 1986—to more than $25 per barrel by the end of the year.[7] These higher fuel costs—combined with strong economic conditions, higher equipment costs, and driver shortages—attributed to this industry's higher prices.

Rail freight transportation prices steadily declined over the last several years, despite periodic marginal increases and the problems attributed to consolidations and mergers in the mid-1990s. The index for railroad line-haul operations rose 0.1 percent in 1999, after rising 0.5 percent in 1998. Similar to last year, this advance reflected increased charges for trailer-on-flatcar freight shipments and passenger transportation services. Prices for non-trailer-on-flatcar freight shipments fell 0.2 percent for the year. In 1999, intermodal (shippers and containers on flatcars) freight volume totaled more than 9 million trailers and containers—3.1 percent higher than in the prior year. Total freight volume for domestic railroads reached 1,404.6 billion ton-miles for 1999, representing a 1.8-percent increase from last year. Carload freight volume actually decreased 0.8 percent in 1999.

The index for scheduled air transportation accelerated from 2.5 percent in 1998 to 6.7 percent in 1999. Prices for the nonscheduled air transportation industry also rose in 1999. Fuel costs account for more than 10.0 percent of total expenses in the airline industry. As a result, a 90.9-percent jump in jet fuel prices put upward pressure on air transportation prices in 1999. In addition, a strong U.S. economy helped increase demand for air travel. The airline industry enjoyed its eighth consecutive year of air traffic growth in 1999. Through-

Table 7. Percent change in Producer Price Indexes for the net output of selected service industries, 1993–99

SIC code	Industry	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99
	Distribution						
4011	Railroads, line-haul operating	0.4	–0.3	0.0	1.0	0.5	0.1
4212	Local trucking without storage	1.7	1.9	.0	.2	1.7	1.1
4213	Trucking, except local	3.1	.9	3.5	2.6	3.4	3.4
4214	Local trucking with storage	.7	10.9	.1	.6	.5	.5
4215	Courier services, except by air	3.8	3.3	3.0	3.8	4.2	3.4
4221	Farm product warehousing and storage	.6	2.2	–1.5	2.0	.6	5.3
4222	Refrigerated warehousing and storage	.6	1.7	.5	.1	.5	1.2
4225	General warehousing and storage	1.3	1.3	1.4	.7	2.9	2.6
4311	United States Postal Service	.0	10.4	.0	.0	.0	2.2
4412	Deep sea foreign transportation of freight	–3.9	.8	.7	–3.7	4.7	22.9
4424	Deep sea domestic transportation of freight	7.6	–.6	1.9	–.6	.2	1.2
4432	Freight transportation on the Great Lakes-St. Lawrence Seaway	–1.4	3.0	1.8	1.4	.8	–.1
4449	Water transportation of freight, n.e.c.	15.4	9.7	–10.1	–.4	–2.2	8.1
4491	Marine cargo handling	–.5	–.9	1.0	1.2	1.8	1.5
4492	Tugging and towing services	3.5	5.3	2.4	2.2	2.8	2.9
4513	Air courier services	1.6	1.9	4.6	–3.9	3.1	5.1
4581	Airports, flying fields, and airport services	1.1	2.2	3.8	3.0	3.0	3.9
4612	Crude petroleum pipelines	13.7	4.6	–12.4	–3.7	1.4	–1.7
4613	Refined petroleum pipelines	1.8	.1	.4	1.2	–1.1	.3
4731	Freight transportation arrangement	–	–.7	2.7	–1.4	–.6	–2.8
	Communications						
4813	Telephone communications, except radiotelephone	–	–	–.1	–.4	–1.7	–3.0
4832	Radio broadcasting	6.8	5.8	10.8	3.1	.8	7.7
4841	Cable and other pay television services	–.4	3.2	5.1	4.7	3.7	3.3
	Real estate						
6512	Operators and lessors of nonresidential buildings	–	–	–.6	2.2	1.2	5.7
6531	Real estate agents and managers	–	–	–.5	1.4	2.6	1.5
	Professional, scientific, and technical						
7311	Advertising agencies	–	–	1.7	2.5	1.3	2.8
8111	Legal services	–	–	–	4.1	2.5	2.9
8711	Engineering design, analysis, and consulting services	–	–	–	3.1	2.9	3.1
8712	Architectural design, analysis, and consulting services	–	–	–	3.0	5.3	4.9
8721	Accounting, auditing, and bookkeeping services	–	–	2.8	2.1	3.0	3.5
	Health care						
8011	Offices of physicians	4.1	2.9	.7	1.2	2.6	2.1
8053	Skilled and intermediate care facilities	–	5.9	5.4	4.2	4.4	4.0
8062	General medical and surgical hospitals	3.4	3.7	1.5	.5	1.3	1.8
8063	Psychiatric hospitals	4.2	.1	5.0	–6.7	.5	.9
8069	Specialty hospitals, except psychiatric	5.2	1.8	2.9	.6	2.3	2.7
8071	Medical laboratories	–	5.2	.2	.9	.2	–.8
8082	Home health care services	–	–	–	6.2	.5	4.0
	Other						
4512	Air transportation, scheduled	–.7	8.7	6.5	.9	2.5	6.7
4522	Air transportation, nonscheduled	.7	1.8	2.2	–1.6	2.6	2.0
4724	Travel agencies	–2.7	–6.9	2.6	1.5	–2.3	.3
6311	Life insurance carriers	–	–	–	–	–	–.3
6331	Property and casualty insurance	–	–	–	–	–	1.1
7011	Hotels and motels	1.4	4.0	4.8	4.1	4.2	2.8
7349	Building cleaning and maintenance services, n.e.c.	–	1.6	2.0	1.4	1.1	2.6
7361	Employment agencies	–	.8	1.8	1.0	2.9	2.2
7363	Help supply services	–	3.8	1.4	1.8	2.2	1.8
7372	Prepackaged software	–	–	–	–	.9	–2.4
7513	Truck rental and leasing, without drivers	2.2	3.6	–.8	.5	–.9	.3
7514	Passenger car rental, without drivers	2.4	7.4	–5.0	13.7	–4.0	3.8

NOTE: Calculations are based on a 12-month change from December to December of indicated years. Dashes indicate that the index was not in estimation.

n.e.c. = not elsewhere classified.

out the first half of 1999, revenue passenger miles increased at a 3.3-percent annual rate.

Other transportation service industries with increasing price indexes in 1999 include courier services (land and air), farm product warehousing and storage, marine cargo handling, tugging and towing services, and airports and airport services. From December 1998 to December 1999, the index for foreign freight transportation jumped 22.9 percent, following a 4.7-percent rise during the same period in 1998. Domestic freight transportation and water transportation also rose in 1999.

Among real estate industries, the index for operators and lessors of nonresidential buildings rose 5.7 percent in 1999, after registering a 1.2-percent increase in 1998. The strong economy helped keep vacancy rates low and created good opportunities for new construction. During the third quarter of 1999, the national rental vacancy rate stood at 8.2 percent.[8] The U.S. Census Bureau's vacancy rate for all rental apartments (five or more units in structure) fell to 8.7 percent, the lowest rate since 1985.[9] Similarly, in the professionally managed, generally "upscale" segment of the market, vacancies dropped to 3.9 percent. While 1999 was relatively lackluster for nonresidential construction as a whole, the most impressive growth came from continued gains in the office sector. As a partial result of the mini-boom in office buildings, the commercial sector posted a gain of nearly 8.0 percent—almost three times the overall nonresidential average.[10]

The index for real estate agents and managers increased 1.5 percent in 1999, after rising 2.6 percent in the previous year. Real estate brokerage increased 3.3 percent, and real estate appraising increased 8.1 percent in 1999. Continued plentiful employment, rising real income, 7.0-percent mortgage rate fluctuations, and higher limits on Federal Housing Administration loans, all led to increasing home sales, as well as higher fees for appraisals and commissions on sales.

The functions performed by advertising, legal, and accounting firms are required in the day-to-day operations of most companies, and professional, scientific, and technical firms in the United States maintain a worldwide client base. Domestic economic strength has further increased demand for activities such as corporate real estate, banking and commercial-type legal counsel, auditing, and tax preparation and consulting. The indexes for all of these service lines increased in 1999 for the third consecutive year. As a result of the strong economy, new construction helped raise prices for architectural design, analysis, and consulting services.

The index for radio broadcasting advanced 7.7 percent in 1999, following a 0.8-percent rise in the previous year. The dramatic rise in prices for radio broadcasting can be attributed to higher radio advertising rates in 1999. As a result of the deregulatory Telecommunications Act of 1996, the industry has experienced the benefits brought on by the large number of mergers and acquisitions. This industry consolidation allowed large radio groups to control more of the market and have greater pricing power. It also allowed these groups to package their less-valuable inventory with their highly priced spots, resulting in greater prices across the board. Also, the radio industry reaped great benefits from heavy spending for advertising due to new e-commerce and other web-related companies in the last year. In addition, demand for advertisement creation and placement increased at a faster rate in 1999.

The index for cable and other pay television services rose 3.3 percent, after a 3.7-percent increase in 1998. Price increases continued to advance for subscriber services. Prior to this year, the Federal Communications Commission regulated rates for most levels of cable service. However, 1996 Telecommunications Act provisions brought an end to rate regulation. Since March of 1999, cable systems have been free from most rate regulations and now have the ability to increase rates at their own discretion. A limiting factor that cable systems considered when making pricing decisions is the direct-to-home satellite industry, which experienced considerable growth in its subscriber base. Cable advertising rates increased in 1999. This followed a trend of rising prices in the previous few years. The proliferation of cable channels also led to increased competition, forcing individual networks to keep their prices relatively stable. New advertising opportunities on the Internet also led to greater competition for advertising dollars.

The index for telephone communication (except radio telephone) fell 3.0 percent, following a 1.7-percent drop in 1998. Competition among long-distance carriers forced public-switched toll prices down 5.8 percent. The index for local service (except private lines) increased only 0.2 percent. Little has changed in price levels since passage of the 1996 Telecommunications Act. Portions of this Act were meant to increase competition and reduce prices for local telephone service; however, outcomes have not yet been realized to any substantial degree.

The index for wireless telecommunications (introduced in June 1999) advanced 3.0 percent during the 6 months ended in December. This advance was largely attributable to increases in cellular and other wireless voice grade service (up 6.0 percent) and paging services (up 9.4 percent) over the 6-month period.

The index for passenger car rental (without drivers) rose 3.8 percent in 1999, after falling 4.0 percent in 1998. Higher fuel prices and an expanding economy favoring expenditures for leisure and business travel contributed to this turnaround.

Prices received by providers of hotels and motels rose 2.8 percent, following a 4.2-percent gain in the prior year. Charges for guestroom rentals rose 3.8 percent, while prices for food and beverages rose 2.9 percent. However, other guest services such as casino games fell 5.4 percent. The strong economy has helped to keep occupancy rates

relatively high, allowing hotels and motels to increase room-rental charges.

Prepackaged software prices showed a 2.4-percent decrease in 1999, after a 0.9-percent rise in its first year of publication. Falling prices were partly due to declines in computer games and other prepackaged software.

In its first year of publication, the index for property and casualty insurance increased 1.1 percent. The 2.8-percent increase in homeowners insurance helped stimulate the increase in the property and casualty insurance index for 1999. One explanation for this increase is that many insurers addressed catastrophic losses through higher premiums, especially in catastrophe-prone zones. According to the Property Claim Services unit of Insurance Services Office, Inc., the United States experienced 99 catastrophic events through September 1999 with insured losses of $7.4 billion.

By contrast, the index for life insurance carriers declined 0.3 percent from December 1998 to December 1999. Declines for life insurance policies and fixed-rate deferred annuities attributed to the drop in life insurance carriers. In order to remain competitive, many insurers are also decreasing their premiums for the various life insurance policies they sell. Increased competition from consolidation in the industry also contributed to the decrease in life insurance carriers. □

Notes

[1] For details, see Todd Wilson, "Core consumer prices in 1999; low by historical standards," *Monthly Labor Review*, April 2000, pp. 3-5.

[2] See *International Petroleum Data* (Energy Information Administration), on the Internet at **http://www.eia.doe.gov/emeu/international/petroleu.html#ProductionA**.

[3] See *Petroleum Supply Annual, 1999, Volume I* (Energy Information Administration), on the Internet at **http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/current/pdf/volume1_all.pdf**.

[4] See *East Asia: The Energy Situation* (Energy Information Administration), on the Internet at **http://www.eia.doe.gov/emeu/cabs/eastasia.html** (visited June 15, 2000).

[5] See *Increases in Crude Oil, Distillate Fuels and Gasoline Prices, Statement of John Cook, Petroleum Division Director, EIA, Before the Committee on Energy and Natural Resources, U.S. Senate, February 24, 2000*, on the Internet at **http://www.eia.doe.gov/pub/oil_gas/petroleum/presentations/2000/senate022400/senate022400.htm** (visited June 15, 2000).

[6] Ralph W. Morris, "Motor Vehicles, 1999," *Survey of Current Business*, February 2000.

[7] See *Increases in Crude Oil, Distillate Fuels and Gasoline Prices*.

[8] Daryl Delano, "Dollar value of new multifamily construction up," *Building Design & Construction*, February 2000.

[9] See "Vacancy rates drop," *Journal of Property Management*, April 2000.

[10] Daryl Delano, "Office buildings: Biggest growth area last year," *Building Design & Construction*, March 2000.

Married women, work, and values

Working women appear to have a personal-value structure different from that of nonworking women; economic and political values are more prominent among women who work, while social and religious values play a greater role for women who stay at home

Mahshid Jalilvand

An examination of the relevant data shows a continuing secular increase in the labor force participation of married women—a phenomenon Ralph Smith called a "subtle revolution" two decades ago.[1] However, this growth has slowed down in recent years and has at times been interrupted by factors such as increased educational investment among married women, the recession of the early 1990s, a rising birthrate, and a slowdown in women's return to work after giving birth.[2] The Bureau of Labor Statistics projects that by the year 2008, women will form 48 percent of the labor force, compared with 46 percent in 1998.[3] Women in their forties who are not in the labor force mostly are taking care of their family (58 percent) or are retired (29 percent).[4]

Cross-sectional studies usually have supported the idea that the higher the husband's income, the lower is the labor force participation rate of his wife. This relationship is just what the theory of the backward-bending supply curve would predict—a strong inverse relationship, other things being equal, between husbands' income and women's participation rate. A wife's freedom from the labor market is looked at as a normal good. So, accordingly, only "poor" women work out of economic necessity. Husbands with higher incomes would tend to have a smaller proportion of wives in the labor force, because they could afford the luxury of stay-at-home wives and the wives could be relieved of the stress of contributing to the family income. However, considering the rise in real income that, in general, has taken place over time, the increase in labor force participation of wives in recent years generates some doubt about the presumptive relationship. The need for money to help make ends meet seems to be one of the most popular explanations of wives working, but that can hardly be the reason for the rapid rise in married women's participation rate,[5] because wives stayed home in earlier decades, when their husbands were earning less. Needing money seems to be a universal and constant factor and thus cannot explain the increasing labor force participation of women.[6]

The theory of labor supply, which relies on the income and substitution effects of a change in the wage rate, views the demand for leisure as a consumption good. However, women are faced with a three-way model of choice when making labor market decisions. The choices are leisure, paid work, and unpaid work in the home. As the wage rate changes, income, the price of leisure, and the monetary value of the productivity of work time in the market compared

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with time spent at home change for women. This scenario helps explain why the labor force participation of women is increasing in spite of the increasing real incomes of husbands.[7]

Studies have shown that the labor force participation rate of wives whose husbands' incomes were in the top half of the income distribution has been rising more than the rate of wives whose husbands' incomes were in the lower half. Higher earning husbands tend to have higher earning wives, so surely, other, nonpecuniary factors are involved that make the participation-income relationship less negative.[8]

The labor force participation of married women has increased sharply since 1960. Studies have shown that some other factors besides their husbands' income influence women's participation.[9] Among these factors are an increase in the amount of the wives' education, an increasing wage rate, the changing economic position of women and the character and conditions of their work, declines in the male-female earnings gap and in sex discrimination, lower fertility, a larger interval between marriage and the birth of the first child, the use of birth control, the development of time- and labor-saving capital-intensive devices (household technology), a secular decline in the length of the workweek, increasing urbanization, the unemployment and inflation rates, and, finally, government laws and practices.

According to so-called push-and-pull theories, the factors influencing women's decisions whether to participate in the labor force can be subdivided into those external to the household and those internal to the household.[10] External factors, based on supply and demand in the labor market, will pull women from home into the workforce as a response to excess demand. Internal factors, related to the characteristics of the individual and the household, will push women out of home into the labor market.

Some attribute a portion of the increasing labor force participation of wives to "women's increasing perception of market work and careers as sources of rewards (psychic as well as financial) that can be complementary to rather than substitutable for careers in the home."[11] Today, the traditional family model of husband as breadwinner and wife as homemaker holds only for a very small proportion of couples. Dual-earner families are a major and growing segment of the labor force, and increasing numbers of earners in such families are taking second jobs. A 1997 *Monthly Labor Review* article states that, in 1996, the multiple-jobholding rate for women was 6.2 percent, slightly higher than the 6.1-percent rate for men, and that women accounted for 47 percent of all multiple jobholders that year.[12]

In most economic models, economic agents are assumed to be in some sense rational. As consumers, they maximize expected utility, and as producers, expected profit. As rational agents, they choose, among alternative courses of action, the one that, on the average, will leave them best off. In the language of the utilitarian, they maximize that expected utility which is the subjective value of perceived possible outcomes. According to some researchers, people seem to be maximizing expected utility rather well.[13]

Besides economic factors, *personal values* could explain the differences in the decisionmaking behavior of different groups of people. Personal values are ideas about what is desirable in situations in which there are alternative courses of action. Personal values are believed to be stable and, according to Edward Spranger, may be classified as theoretical, economic, aesthetic, social, political, and religious.[14]

In this article, particular attention is given to the concept of personal values and to their structure in different individuals in order to examine the possible effect of those values on labor market-related decisions of married women. The purpose of the article is twofold: (1) to examine the effect of the personal-value structures of a group of women, some who work and some who do not, on their decisions regarding labor force participation and (2) to test the truth of the statement that both socioeconomic and sociopsychological factors affect the labor market-related decisions of women. As the discussion up to now has indicated, much of the literature from the 1960s on down through the 1980s has focused on *external* factors in explaining women's increasing labor force participation. Even a very recent source—the December 1999 issue of the *Monthly Labor Review*, devoted entirely to women in the workforce—concentrates almost exclusively on extrinsic influences on women's connection to the labor force. But a tradition dealing with *internal*, or intrinsic, aspects of women's decisions to go to work—a tradition that coexisted with the external-factors explanation during the 1960s through 1980s—deserves some attention as well. It is this tradition into which a personal-value account of women's increasing labor force participation falls.

Personal values

Half a century ago, Clyde Kluckhohn defined *value* as "a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means, and ends of action."[15] In two separate works, one by Anthony G. Athos and Robert E. Coffey and the other by Karl E. Scheibe, the authors describe personal values as ideas and questions about what is good, desirable, or preferable for individuals in situations in which they are faced with alternative courses of action.[16] According to Milton Rokeach, values are "abstract ideas, positive or negative, not tied to any specific object or situation, representing a person's beliefs about modes of conduct. . . . [They are] "standards of oughts and shoulds."[17] In this respect, George W. England observes that a person's value structure is "a relatively permanent perceptual framework which shapes and influences the general nature of an individual's behavior. Values are similar to attitudes but are more ingrained, permanent, and stable in nature."[18] Rokeach, too, states that values are deeper and

broader than attitudes and are determinants, rather than components, of attitudes.[19] Values inform behavior standards, goals, one's assessment of how attractive outcomes, events, and objects are, and, in the end, one's motivation to do all sorts of things.[20]

Classification of personal values

In his book *Types of Men*, Spranger classified people into six major groups on the basis of their value orientations:

1. *The theoretical.* This type of person's primary interests are the discovery of truth and the systematic ordering of knowledge. To pursue his or her goals, the theoretical person will take a "cognitive" approach, will look for identities and differences, will disregard the beauty or utility of objects in judgments, and will seek only to observe and to reason. The theoretical individual is an intellectual with empirical, critical, and rational proclivities; examples are scientists and philosophers.

2. *The economic.* The economic person is mainly interested in utility, self-preservation, the practical affairs of the business world, production, marketing, consumption, the use of economic resources, the elaboration of credit, and the accumulation of tangible wealth. Thus, his or her decisions are dominated by the expected economic and practical results. This type of individual is thoroughly practical and represents the stereotype of the American businessperson.

3. *The aesthetic.* Interested primarily in the artistic aspects of life, the aesthetic person values form and harmony, judges events in terms of grace, symmetry, or harmony and fitness, and enjoys events for their own sake.

4. *The social.* This type of person loves people and has an altruistic or philanthropic outlook on life. Viewing other people as ends, the social individual tries to be kind, sympathetic, and unselfish. He or she looks at theoretical, economic, and aesthetic people as having rather cold and inhuman orientations. The social person values love as the most important component of a human relationship and has an attitude toward life that approaches that of the religious type.

5. *The political.* This type of person's main interest is power in all activities (not just politics). Often, political individuals are leaders in many areas, seeking personal power, influence, renown, and recognition.

6. *The religious.* The religious person is mystical and seeks to relate, in a meaningful way, to the cosmos as a whole. His or her mental activity is constantly directed toward creating the highest and most satisfying values in experience.

According to Spranger, all people have all of these personal values, which form a hierarchy that varies from person to person. Gordon W. Allport, Philip E. Vernon, and Gardner Lindzey offer an empirical design for measuring the relative importance of the six personal values within each individual's personal-value hierarchy.[21]

Personal values and decisionmaking

The importance of judgment in making decisions has long been recognized, primarily because of the following three major considerations:[22]

1. One cannot physically gather, assimilate, and evaluate all of the information related to the numerous external forces that are operative in any given situation.

2. Whatever amount of information that can be collected and evaluated is frequently imperfect in regard to what it tells us.

3. The large number of variables related to strategic decisions cannot be modeled, in the sense of establishing precise functional relationships that provide a deterministic output or "correct" decisions.

Accordingly, the role of judgment is most significant when rendering a decision depends on evaluating imperfect information. Thus, in these situations, making a decision is not wholly an objective process, and the personal values of decisionmakers play an important role.

Over the years, a number of researchers have examined the influence of personal-value structures on behavior and on the selection of alternative courses of action in making decisions.[23] The general consensus is that values are, or at least become, a part of one's personality that affect an individual's goal-oriented behavior and decisionmaking.

The study

The study reported in this article required a group of women, some of whom worked and some of whom did not. To provide a specific class with some degree of homogeneity, the wives of all male employees of a certain institution were chosen for the study. Two groups were expected to emerge from this population: working women and nonworking women. To test the hypotheses related to the personal-value differences among the two groups of women, some measure of the relative prominence of the six basic interests or motives constituting personal values was needed.

The data were collected with the use of a questionnaire, the first part of which contained questions related to the

respondent's highest level of educational attainment, employment status, spouse's income and any income other than the respondent's wages, and, finally, number of children under 18 and 6 years old. Then the Allport, Vernon, and Lindzey questionnaire,[24] based on Spranger's book, was administered, with a few changes to make it more applicable to women.

The following null hypotheses were tested:

(I) The mean scores of personal values do not differ from person to person; that is, all values have the same degree of prominence among all individuals.

(II) The mean scores of corresponding personal values for the working and nonworking groups of women do not differ; that is, the personal-value structures of the two groups of women are the same.

(III) For each personal value, the mean scores between individuals do not differ among the two groups of women.

A word of explanation is in order regarding the difference between hypotheses (II) and (III). Hypothesis (II) considers all values at once and tests the overall difference between the personal-value structures of the two groups; hypothesis (III) looks at a personal value at a time. Usually, the first overall difference is tested, and if that is proven to obtain, then more detailed tests are needed to see if *each* of the values is significantly different or if only some of them are. If hypothesis (II) results in no overall differences between the two groups, then no more testing is done.

The purpose in testing these null hypotheses was to see whether personal values have different degrees of relative prominence, whether working and nonworking women have different personal-value structures, and whether economic and political values are higher in the hierarchy of personal values than are social and religious values among working women (because economic and political values might appear more closely tied to work).

Out of all the questionnaires mailed, 69 percent (145 of 211) were completed and returned; the few that were completed incorrectly were excluded from the study, leaving a total of 140 (66 percent) completed questionnaires that were used. The following tabulation shows the employment status of the respondents:

	Frequency	*Percent*
Works	91	65
Does not work	49	35

Based on their responses to the different questions in the questionnaire, six scores ranking the personal values were calculated for each of the participants. The scores, as well as the rest of the personal information gathered, were then analyzed by using the following techniques:

1. The software package SPSSx (Statistical Package for Social Science) was used to analyze the data statistically.[25]

2. Frequency distributions were utilized to observe the distribution of the participants among different subgroupings with respect to their level of education, employment status, husband's income and other incomes, and number of children.

3. Mean scores of the six personal values were computed for all participants and also all subgroupings, in order to compare the rankings of the personal values among the working-nonworking groups and subgroups.

4. Multivariate analysis of variance was employed to examine the overall differences in personal values among all participants and among working-nonworking groups.

5. Univariate analysis of variance was used to examine differences among working-nonworking groups and subgroups with respect to each of their personal values.

Results

The results of the study may be summarized as follows (see table 1 for the mean scores of personal values):

1. According to the frequency distributions and cross tabulations of the participants, working wives and nonworking wives have a high degree of similarity with respect to factors such as other income besides the wife's wages and salaries, level of education, and number of children.

2. For the overall population of the study, a group of personal values with different degrees of relative importance was observed. These personal values are rank ordered and could be presented in a hierarchy of priorities based on the degree of the relative importance (mean score) attached to each of them. Accordingly, null hypothesis (I) is rejected.

3. For the population as a whole, the ranking of personal values is, from highest to lowest, religious, aesthetic, social, theoretical, political, and economic.

4. Working and nonworking wives had similar rankings of personal values, except that the aesthetic and social values were inverted between the two groups.

5. The degrees of relative importance of the six personal values differ significantly for the two groups of women. Accordingly, null hypothesis (II) is rejected.

Table 1. Personal-value hierarchies of the whole population, working women, and nonworking women, ranked by mean score

Rank	Whole population		Working women		Nonworking women	
	Personal value	Mean score	Personal value	Mean score	Personal value	Mean score
1	Religious	34.93	Religious	33.66	Religious	37.28
2	Aesthetic	32.63	Aesthetic	32.64	Social	32.70
3	Social	31.91	Social	31.48	Aesthetic	32.60
4	Theoretical	30.35	Theoretical	30.75	Theoretical	29.61
5	Political	25.81	Political	26.58	Political	24.40
6	Economic	24.38	Economic	24.90	Economic	23.41

6. Religious value is the dominant personal value for the whole population. But it has a higher degree of relative importance for nonworking women than for the working group.

7. Social value is more important to nonworking women than to working women.

8. Economic and political values are more important to working women than to nonworking women.

9. Theoretical value and, even more so, aesthetic value are similar in importance to both groups of women.

10. In accordance with items 6, 7, and 8, null hypothesis (III) is rejected for most of the personal values, except for the theoretical and aesthetic.

IN THIS ARTICLE, THE PERSONAL-VALUE STRUCTURES OF WOMEN have been examined to ascertain whether they have any effect on the women's labor market-related decisions. Women's personal values appear to have different degrees of relative importance and are ranked by each individual. The hierarchy of personal values of working women appears to be different from that of nonworking women.

When the two groups of women are broken down further into subgroups, significant differences are still observed among some personal values. However, the hierarchies do not differ as strongly as in the more aggregated groups. This phenomenon could be explained by the fact that, as the groups are disaggregated, the personal-value hierarchies of the members of a subgroup become more similar.

The mean scores for the personal values of working women and nonworking women, as well as the mean scores of other subgroupings, indicate that economic and political values have a greater relative importance for working women than do social and religious values, which are relatively more important for nonworking women. A followup study might be conducted with a larger group of women in a larger geographic area where the participants are not as homogeneous. In all likelihood, even more significant dissimilarities between the personal values of working and nonworking women will be found. □

Notes

[1] Ralph E. Smith (ed.), *The Subtle Revolution: Women at Work* (Washington, DC, The Urban Institute, 1979).

[2] Aaron Bernstein, "Workers May Get Scarce, But Nobody's Scared," *Business Week*, July 11, 1994, pp. 95–98; Howard V. Hayghe and Suzanne M. Bianchi, "Married mothers' work patterns: the job-family compromise," *Monthly Labor Review*, June 1994, pp. 24–30.

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[5] Victor R. Fuchs, *How We Live* (Cambridge, MA, Harvard University Press, 1983).

[6] Nathan Keyfitz, "Population Appearances and Demographic Realities," *Population and Development Review*, March 1980, pp. 47–64.

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[8] Paul Ryscavage, "More wives in the labor force have husbands with 'above-average' incomes," *Monthly Labor Review*, June 1979, pp. 40–42.

[9] Mincer, "Labor Force Participation of Married Women"; see also Cynthia B. Lloyd and Beth T. Niemi, *The Economics of Sex Differentials* (New York, Columbia University Press, 1979).

[10] Alfreda P. Iglehart, *Married Women and Work* (Lexington, MA, Lexington Books, 1979).

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[12] John F. Stinson, Jr., "New data on multiple jobholding available from the CPS," *Monthly Labor Review*, March 1997, pp. 3–8.

[13] Ward Edwards, "Decision Making; Psychological Aspects," *International Encyclopedia of the Social Sciences*, vol. 4, edited by David L. Sills (New York, Macmillan and Free Press, 1968), pp. 34–42.

[14] Edward Spranger. *Types of Men* (Halle, Germany, Max Niemeyer Verlag, 1928); translation by Paul J. W. Pigors (New York, Johnson Reprint Company, 1966). Note that economic personal values are different from the external economic factors, such as the unemployment rate and the inflation rate, that may influence a person's decisionmaking. Spranger's classification and the questionnaire based on it, though dating from 1928, are still being used and cited in the literature. For example, references to *Types of Men* appear in Lawrence J. Axelrod, "Balancing Personal Needs with Environmental Preservation: Identifying the Values That Guide Decisions in Ecological Dilemmas," *Journal of Social Issues*, fall 1994, pp. 85–104; H. T. Hunt, "*Triumph of the Will*: Heidegger's Nazism as Spiritual Pathology," *Journal of Mind and Behavior*, fall 1998, pp. 379–414; and S. S. Bubnova, "Value Orientations of Personality as a Multivariate Non-linear System," *Psikologicheskii Zhurnal*, Sep.–Oct, 1999, pp. 38–44. The questionnaire has many multiple-choice questions that are highly general and still relevant today. Examples of such questions are "Which area of study do you think is more important?" and "What type of news do you read first?"

[15] Clyde K. Kluckhohn, "Values and Value Orientations in the Theory of Action," in Talcott Parsons and Edward A. Shils (eds.), *Toward a General Theory of Action* (Cambridge, MA, Harvard University Press, 1951); quote from p. 395.

[16] Anthony G. Athos and Robert E. Coffey, *Behavior in Organizations: A Multidimensional View* (Englewood Cliffs, NJ, Prentice-Hall, 1968); Karl E. Scheibe, *Beliefs and Values* (New York, Holt, Rinehart and Winston, 1970).

[17] Milton Rokeach, "The Role of Values in Public Opinion Research," *Public Opinion Quarterly*, vol. 32, 1959, p. 124; and "Some Unresolved Issues in Theories of Beliefs, Attitudes, and Values," *1979 Nebraska Symposium on Motivation*, vol. 27 (Lincoln, NE, University of Nebraska Press, 1980), pp. 261–304; quote from p. 272.

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The impact of strikes on current employment statistics

Karthik A. Rao

Among the important economic indicators released by the Government each month is the employment estimate from the Current Employment Statistics (CES) program.[1] It is important for users of CES data to understand how strikes affect CES estimates so that they can accurately interpret the economic meaning of the change in the number of employees over the month. Conceptually, the CES survey measures the number of persons *on payrolls*—that is, those actually getting paid for work or for leave that occurred during the reference pay period. Thus, persons on strike for the entire period are not counted as employed, because they are not on the payroll.[2] The growth in employment over the month is affected by the net change in the number of strikers—the number of persons newly on strike minus the number who returned to work after a settlement. If the net is positive (more new strikers than returning workers), employment growth over the month is reduced; conversely, if the net is negative, employment growth is boosted.

While the reflection of strikers as a reduction in employment may cloud any underlying trend analysis, it is exactly the measure needed for other uses of CES data. For example, CES data are a major input for generating estimates of personal income, part of the Bureau of Economic Analysis' National Income and Product Accounts. Also, besides employment, the CES program produces estimates of average weekly hours and average hourly earnings. The product of employment, weekly hours, and hourly earnings yields aggregate earnings, which form the basis of the wage and salary component of the Commerce Department's preliminary estimates of personal income. If persons on strike were included in the CES estimates, the aggregate earnings data would be inflated; estimates of the strikers' earnings would have to be "backed out" of the data used to compute personal income. Another major indicator that utilizes CES data is labor productivity, which divides output by the number of hours that went into producing the output. CES data on aggregate hours (employment multiplied by average weekly hours) are used in this computation. If strikers' hours were in the data, analysts would have to eliminate them before computing labor productivity.

Thus, for a variety of reasons, it is important that strikes be identified and accurately reflected in the CES estimates. It also is important that persons using CES data to analyze economic trends be able to discount the effect of strikes in the data. This technical note provides an overview of how strikes can affect CES estimates and of where to find current and historical information on the associated effects.

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Strikes and employment

The largest strikes that have affected CES estimates in the past 25 years are listed in table 1. Three major factors determine how, where, and to what extent strikes affect the CES estimates: the reference pay period, the industry code, and the striking company's presence in or absence from the sample.

Reference pay period. The most critical factor in determining whether a strike will be reflected in CES estimates is its timing. The CES reference pay period is the pay period that includes the 12th of the month. However, the length of pay periods varies among establishments. Because persons paid for any part of the reference period are counted as employed, workers must be on strike for their *entire* reference pay period in order to be excluded from CES employment counts. In all of the examples in exhibit 1, we assume that the strikers' January reference pay period is from Sunday the 11th to Saturday the 17th and their February reference pay period is from Sunday the 8th to Saturday the 14th. When the strikes end, all workers are called back the next day. All plants involved in the strike are included in our sample.

In addition, strikes may be rolling, which means that a given strike may start and end at different dates at various establishments. For example, the 1983 strike of 640,000 workers against American Telephone and Telegraph (AT&T) officially started on August 7 and ended on August 28. On August 15, 20,000 workers from Western Electric's City Workers of Oklahoma joined the strike, thus bringing the total number of striking workers to 660,000. However, these additional strikers had worked for part of the reference pay period, so they were counted as being employed.

Industry code. The Standard Industrial Classification (SIC) system is used by the CES program to place all of the establishments in its sample in a specific industry.[3] SIC codes range from one to four digits. A four-digit SIC is the most specific classification, a one-digit SIC the most general. For instance, the two-digit SIC 37 stands for transportation equipment, which includes everything from cars and automobiles to guided missiles and space vehicles. To further delineate this industry, it is classified under SIC code 372, "aircraft and parts," which refers to anything dealing with the aircraft industry, from air tubes to fuselage assemblies. The most precise SIC code for aircraft production is the four-digit 3721, "aircraft manufacturing." When a strike occurs, it is reflected in data at the four-digit level and all the higher level aggregates that include the affected four-digit industry.

A company with numerous establishments or work sites can be classified into many four-digit SIC codes. For example, the subsidiary of an integrated

Exhibit 1. Examples of effects of strikes on employment figures

Strike begins	Strike ends	Number of workers involved	On strike entire—		Effect on—		
			January reference period	February reference period	January employment	February employment	March employment
Example 1: Jan. 15	Feb. 5	2,000	No	No	None, because the workers were employed in some part of January's reference week; therefore, they are counted as employed.	None, because the strike did not continue through the end of February's reference week. Workers were back on payrolls and counted as employed.	...
Example 2: Jan. 20	Feb. 20	3,000	No	Yes	None. Strike began after the January reference pay period.	Employment level and over-the-month change decrease by 3,000.	Employment level and over-the-month change increase by 3,000.
Example 3: Jan. 18	Feb. 6	5,000	No	No	None. Strike began after the January reference pay period.	None. Strike ended before the February reference pay period.	...

automobile company that produces the steel for the body of a car may be classified into "blast furnaces" (SIC 3312). However, the subsidiary that turns the steel into auto parts may be classified into "automotive stamping plants" (SIC 3465). Finally, the part of the automobile company that actually assembles the car may be classified into "motor vehicles and passenger car bodies" (SIC 3711). As a result, strikes against a single company can sometimes be distributed across several industries, affecting employment levels in each.

Presence in the sample. The CES program is an establishment-based sample survey of approximately 390,000 establishments. Known strikes are always fully reflected in the estimates. However, analysts who prepare the estimates often will have to make adjustments based on the extent of the representation of the striking company in the sample. Some companies are completely represented, while others are only partially represented or not represented at all. An example of complete representation is a company with 10 plants on strike, all of which are in the usable sample at the time the estimate is made. Partial representation is signified by a company with 10 plants on strike, but only 5 in the usable sample. No representation is indicated by a company with 10 plants on strike, none of which are present in the sample.

CES industry analysts must assure that a strike is reflected in the CES estimates, regardless of its presence in the sample. Strikes are most easily accounted for if the striking establishments are completely represented in the CES sample. When this is the case, the weight of the striking establishment is adjusted so that the establishment represents only itself in the CES estimates. If a particular strike is only partially or not at all represented in the sample, analysts will make adjustments to the final estimate in order to reflect all persons in the strike. In this case, the number of workers on strike usually is determined by contacting the public relations office of the strike-affected company or by using a published figure that is consistent across a variety of public sources.

Effect on hours and earnings estimates

Besides having an effect on CES employment counts, strikes also affect estimates of workers' average weekly hours and average hourly earnings. These are hours for which production workers either are paid for work or are on paid leave (including paid vacation, holidays, sick leave, or other paid leave) for the refer-

ence pay period.

When strikers work part, but not all, of the reference pay period, the CES survey counts them as employed, but with reduced hours. The magnitude of the reduction on average weekly hours depends on the proportion of workers in the industry's sample with reduced hours and the number of hours they worked.

When workers are on strike for an entire pay period, their hours and earnings can be affected in two ways: through *within-industry effects* and by *sum-across-industries effects*.

Within-industry effects. For the specific industry involved in the strike, estimates are affected only if the hours or earnings of the persons on strike or layoff differ significantly from the industry's average hours or earnings. The impact is phased in slowly over the months the strike continues. Because of confidentiality requirements, the Bureau of Labor Statistics cannot provide the precise impact of a particular strike and related shutdowns on average weekly hours or average hourly earnings for a particular industry. However, the change in the industry estimate will include the impact of the strike, as well as developments reported by other members of the sample. One example of the within-industry effect is the AT&T strike of 1983. In late July of that year, AT&T workers went on strike all across the country. They were on strike for the full pay period that includes August 12. Table 2 shows the estimates of employment, average weekly hours, and average hourly earnings within the category of "telephone communications, except radio" (SIC 4813) during the affected months.

The August over-the-month employment decline of nearly 635,000[4] in the category of "telephone communications, except radio" and an average hourly earnings decline of $0.30 include the impact of the large strike of 640,000 workers against AT&T, as well as normal monthly fluctuations in other reporting establishments. The impact of the AT&T strike was reversed when the strikers returned to work before the next survey reference period.

Sum-across-industry effects. The absence of persons on strike or layoff from payrolls may affect average weekly hours or average hourly earnings at higher levels of industry aggregation. If workers in the specific industry involved in the strike work shorter hours or earn less than workers in other industries in the aggregation, the hours and earnings estimates for the aggregation will be higher. Conversely, if workers in the specific industry involved in the strike work longer hours or earn more than workers in other industries in the aggregation, the hours and earnings estimates for the aggregation will be lower.

For example, a strike in aircraft manufacturing (SIC 3721), which has higher

Table 1. Strikes affecting CES employment by more than 50,000, 1975–2000

Year	Month	SIC	Industry	Impact on CES employment[1]
1975	May	15	General building contractors: residential buildings	75,000
1976	May	301	Tires and inner tubes	59,900
1977	December	12	Coal mining	160,000
1978	January	12	Coal mining	160,000
1980	July	15	General building contractors: residential buildings	105,000
	February	291	Petroleum refining	58,300
	March	291	Petroleum refining	59,200
1981	April	12	Coal mining	160,000
	May	12	Coal mining	162,000
	June	15	General building contractors: residential buildings	51,300
1983	August	481	Telephone communications (AT&T)	640,000
1986	June	481	Telephone communications (AT&T)	86,100
1987	September	82	Educational services	52,000
1989	August	481, 5063, 7374	Telephone communications; electrical apparatus and equipment, wiring supplies, and construction materials; computer processing and data preparation and processing services	125,000
	September	481	Telephone communications (NYNEX)	53,500
	October	481	Telephone communications	53,500
	November	481	Telephone communications	53,500
1994	April	42	Motor freight transportation and warehousing	70,000
1997	August	421	Trucking and courier services, except air (United Parcel Service)	185,000

[1] The amount by which CES employment levels are lowered due to workers on strike. The figure does not include related layoffs or other secondary effects of the strike.

NOTE: Table does not include strikes that occurred outside the CES reference period.

Table 2. CES estimates of employment and of average hours and earnings of telephone communications (except radio) workers (SIC 4813) during 1983 AT&T strike

Month and year	All employment (not seasonally adjusted)	Average weekly hours	Average hourly earnings
Levels:			
July 1983	985.0	40.4	$11.36
August 1983	350.1	40.3	11.06
September 1983	976.3	40.5	11.51
Over-the-month changes:			
July–August	–634.9	–.1	–.30
August–September	+626.2	+.2	+.45

Table 3. Effect of 1998 strike against General Motors on CES employment in manufacturing

Category	June	July	Total declines	August returns
Total	–9,400	–140,600	–150,000	+150,000
On strike	–3,400	–5,800	–9,200	+9,200
On layoff	–6,000	–127,800	–133,800	+133,800
Total, on strike and on layoff	–9,400	–133,600	–143,000	+143,000
Help supply industry (secondary effect)	(1)	–7,000	–7,000	+7,000

[1] No one on strike or on layoff in help supply industry.

weekly hours and hourly earnings than the other two four-digit industries within the category of "aircraft and parts" (SIC 372), would lower average hours and hourly earnings estimates for the aircraft industry (SIC 372). Estimates for transportation equipment (SIC 37) and the entire manufacturing sector would be similarly affected if hours and earnings in aircraft were higher than in these aggregate-level industries. The magnitude of this effect is directly related to the number of persons on strike.

Secondary effects of a strike

Among the potential secondary effects of a strike is that on establishments which are not on strike, but are dependent on the striking establishment. A good example of this is the General Motors (GM) strike of 1998.

On June 5, 1998, 3,000 employees went on strike at a GM fabricated-metal-stamping plant in Flint, Michigan. One week later, an additional 5,800 workers went on strike at a parts plant in Flint. Both strikes ended on July 29. The strike occurred at only those two plants. However, because the plants were critical to GM's supply chain, the strike had a disproportionate effect on production. Automobile assembly plants that relied on parts from the striking establishments were forced to shut down. All told, 150,000 employees were out of work, due to the primary and secondary effects of the strike. (See table 3.) Furthermore, many of these workers were not in the same industry as the original plants on strike. The affected industries included gray and ductile iron foundries (SIC 3321), motor vehicles and passenger car bodies (SIC 3711), and even the help supply industry (SIC 7363).

To assess the effect of the strike on CES hours and earnings estimates, the July estimates were recalculated using the manufacturing industry employment weights for June instead of July. The reason for the recalculation was to ignore any possible effects of the lower number of workers in the relatively high-paying auto-related industries because of the strikes and shutdowns. Table 4 shows the effect on the change in average hourly earnings over the June–July and July–August periods.

Average weekly hours were unaffected by the recalculation. While the exercise shows the effect of all shifts in the distribution of employment across manufacturing industries between June and July, the most important shift was the reduced weight of the high-paid auto industry. Thus, the results can be attributed primarily to the auto strike. Average hourly earnings would have been about 5 cents higher in manufacturing, but less than 1 cent higher at the total private-industry level if the workers affected by the strike had remained on payrolls in July.

Another secondary strike effect occurs when competitors of a striking firm add employees to cover additional business foregone by the striking company. This effect may even offset the magnitude of the strike's primary effect on CES data. A case in point is the strike by 185,000 United Parcel Service (UPS) workers on August 5–20 of 1997 (including the entire reference pay period). The temporary removal of UPS from the delivery services market led to increased business for its competitors. Table 5 shows the impact on air courier services (SIC 4513) owing to the strike against UPS.

Despite the fact that 185,000 UPS workers were on strike, the total loss of employment in the industry was only 166,000. The 19,000-employee difference was determined, in part, to be the result of other air courier services hiring workers to take advantage of their increased business.

Replacement workers

Sometimes the management of establishments on strike hires workers to do the jobs of the workers on strike. The new workers are known as *replacement workers*. The hiring of replacement workers can complicate the estimation of a strike's impact. If replacement workers are hired immediately, then the strike will not be reflected at all in CES data. Furthermore, if replacement workers are hired later during the course of an ongoing strike, their presence may falsely indicate that the strike is over even if it is not. To further complicate matters, replacement workers could permanently displace the strikers, or they could instead be just a temporary solution and be laid off when the strike ends. In dealing with the issue of replacement workers, it usually is not possible to draw conclusions directly from CES data. Instead, one must rely on public reports, company news, and other sources for such information. The Bureau's pledge of confidentiality to its respondents precludes revealing any company-specific information not generally available to the public.

CES strike report

BLS staff prepare a monthly summary of strike activity during the survey reference pay period. This CES strike report contains information about workers directly involved in large strikes (stoppages of 1,000 or more workers) who were idle during the entire reference pay period.[5] The information comes from *public* sources, and the report itself is prepared and released before *any* survey data are compiled. The numbers in the report indicate the possible direct effect of strikes on CES employment estimates for the current month. Thus, the strike report may be useful to persons who are trying to anticipate the upcoming payroll survey data. Also, after the monthly CES estimates are released, analysts attempting to discern underlying economic trends can use the strike report to exclude movements caused by strikes.

The strike report includes information on the number of workers on strike during the current and previous reference periods, new strikes, strikes settled, and the net change. Information is provided on specific strikes and the industries they affect. There are two ways to use the report:

1. Add the total number of people on strike the current month to the overall level of employment to see the level with the strike effect removed.
2. Add the net change in the number of persons on strike to the current over-the-month employment change to remove the effects of strikes.

While the numbers in the strike report are useful to analysts, it is important to note that the figures should be used with caution, as they are preliminary and possibly incomplete. The Bureau of Labor Statistics makes every reasonable effort to ensure the accuracy and completeness of the strike report; however, because the report is based on secondary sources, the Bureau cannot guarantee its accuracy or completeness.

Strike-adjusted employment data

Information on strikes that affect CES employment data is available starting with 1975 and is used as input for the seasonal adjustment process. For the study presented in this technical note, the information was used to compute the net effect of those strikes each month. The net strike effect was then added to the official over-the-month change in employment to compute a strike-adjusted series—that is, a series which removes the effect of strikes. This series, presented in table 6, is a better indicator of underlying economic trends than the official series is. The strike-adjusted historical series also is useful if an analyst

Table 4. Effect of 1998 strike against General Motors on CES estimates of over-the-month changes in average hourly earnings

Sector and months	Over-the-month change		
	As published	Recalculated without strike effect	Difference
Manufacturing:			
June–July	$–0.03	$+0.02	$0.05
July–August	+.11	+.06	–.04
Total private:			
June–July	+.03	+.04	+.01
July–August	+.07	+.06	–.01

Table 5. CES estimates of employment, average weekly hours, and average hourly earnings of air courier services workers (SIC 4513) during 1997 UPS strike

Levels and over-the-month changes	All employment (seasonally adjusted)	Average hourly earnings	Average weekly hours
Levels:			
July 1997	464,000	28.8	$14.78
August 1997	298,000	33	15.48
September 1997	468,000	37.5	14.50
Over-the-month changes:			
July–August	–166,000	4.2	.70
August–September	170,000	4.5	–.98

Table 6. Over-the-month change in employment, excluding the effect of strikes, seasonally adjusted, all employees on total nonagricultural payrolls, 1975–2000

[In thousands]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1975:												
Official series	–420	–403	–323	–121	161	–71	238	354	208	311	120	296
Net strike activity	–	–5	3	33	20	–12	84	–79	15	–44	–9	14
Series excluding strikes	–	–408	–320	–88	181	–83	322	275	223	267	111	310
1976:												
Official series	411	280	213	315	58	66	227	96	261	0	299	197
Net strike activity	–44	–4	11	32	93	–26	54	–55	–74	15	–25	–30
Series excluding strikes	367	276	224	347	151	40	281	41	187	15	274	167
1977:												
Official series	179	277	427	389	367	404	379	214	457	230	370	240
Net strike activity	2	15	16	–26	39	–7	24	24	–34	60	–9	90
Series excluding strikes	181	292	443	363	406	397	403	238	423	290	361	330
1978:												
Official series	193	344	530	745	321	407	226	287	110	363	452	310
Net strike activity	–12	0	–18	–144	5	3	25	11	5	–26	–19	–5
Series excluding strikes	181	344	512	601	326	410	251	298	115	337	433	305
1979:												
Official series	169	257	441	–63	318	274	64	140	–10	211	106	151
Net strike activity	2	10	–4	55	–14	–14	–13	2	19	23	29	–48
Series excluding strikes	171	267	437	–8	304	260	51	142	9	234	135	103
1980:												
Official series	112	147	119	–215	-464	–342	–298	288	82	288	216	224
Net strike activitiy	–55	59	–3	–13	–19	–6	133	-49	–16	–47	–24	–8
Series excluding strikes	57	206	116	–228	–483	–348	–165	239	66	241	192	216
1981:												
Official series	229	92	111	13	–77	143	125	–90	–129	25	–202	–183
Net strike activity	–11	–3	8	177	21	–129	–32	–23	15	–15	–21	1
Series excluding strikes	218	89	119	190	–56	14	93	–113	–114	10	–223	–183
1982:												
Official series	–383	26	–137	–306	–66	–262	–323	–203	–182	–208	–138	26
Net strike activity	4	0	6	6	5	24	–34	21	3	–3	–5	–6
Series excluding strikes	–379	26	–131	–300	-61	–238	–357	–182	–179	–211	–143	20
1983:												
Official series	151	–68	188	265	286	389	427	–340	1,115	320	319	383
Net strike activity	2	5	0	–1	–11	0	30	674	–678	9	–23	–5
Series excluding strikes	153	–63	188	264	275	389	457	334	437	329	296	378
1984:												
Official series	414	519	269	338	302	373	322	238	301	313	330	168
Net strike activity	–16	–6	6	17	–8	13	–11	63	–77	9	5	26
Series excluding strikes	398	513	275	355	294	386	311	301	224	322	335	194
1985:												
Official series	252	148	337	162	267	117	185	231	182	220	188	214
Net strike activity	–41	–1	28	–24	–6	12	–8	32	–5	–5	3	1
Series excluding strikes	211	147	365	138	261	129	177	263	177	215	191	215
1986:												
Official series	99	119	78	178	122	–123	303	159	312	233	165	249
Net strike activity	–32	0	11	–2	–1	167	–145	42	–31	4	–2	0
Series excluding strikes	67	119	89	176	121	44	158	201	281	237	163	249
1987:												
Official series	149	229	233	362	197	149	334	219	164	550	220	344
Net strike activity	0	–31	–6	–9	6	0	7	–1	55	-60	0	–5
Series excluding strikes	149	198	227	353	203	149	341	218	219	490	220	339

Table 6. Continued—Over-the-month change in employment, excluding the effect of strikes, seasonally adjusted, all employees on total nonagricultural payrolls, 1975–2000

[In thousands]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1988:												
Official series	79	423	265	226	274	321	268	199	215	277	277	323
Net strike activity	0	4	11	–8	1	5	16	–4	–7	–6	–11	0
Series excluding strikes	79	427	276	218	275	326	284	195	208	271	266	323
1989:												
Official series	302	251	194	199	101	100	95	115	130	112	281	121
Net strike activity	2	3	27	4	0	11	10	97	–68	4	–6	–72
Series excluding strikes	304	254	221	203	101	111	105	212	62	116	275	49
1990:												
Official series	254	317	198	38	291	79	–162	–164	–86	–183	–200	–109
Net strike activity	0	–3	16	–5	–3	–1	0	2	–2	–1	4	1
Series excluding strikes	254	314	214	33	288	78	–162	–162	–88	–184	–196	–108
1991:												
Official series	–206	–259	–170	–185	–38	93	–69	84	8	–14	–94	6
Net strike activity	–3	–6	–2	–2	5	–6	4	–2	2	–1	8	1
Series excluding strikes	–209	–265	–172	–187	–33	87	–65	82	10	–15	–86	7
1992:												
Official series	–37	–7	42	182	194	46	54	146	66	134	178	147
Net strike activity	–3	0	–3	1	–2	–3	–9	0	12	–8	–4	0
Series excluding strikes	–40	–7	39	183	192	43	45	146	78	126	174	147
1993:												
Official series	236	314	–67	306	343	141	205	213	247	321	255	254
Net strike activity	0	5	–5	4	9	–4	3	5	0	2	–4	–18
Series excluding strikes	236	319	–72	310	352	137	208	218	247	323	251	236
1994:												
Official series	268	230	450	368	347	283	353	340	307	255	406	277
Net strike activity	0	0	0	74	–70	5	9	5	10	–1	–2	–15
Series excluding strikes	268	230	450	442	277	288	362	345	317	254	404	262
1995:												
Official series	317	288	156	185	–34	194	114	306	220	125	157	172
Net strike activitiy	–1	0	0	–1	0	–2	0	3	7	23	1	–41
Series excluding strikes	316	288	156	184	–34	192	114	309	227	148	158	131
1996:												
Official series	–69	489	236	175	344	264	196	278	151	248	266	217
Net strike activity	30	–27	1	–3	0	21	–9	0	–5	–3	0	0
Series excluding strikes	–39	462	237	172	344	285	187	278	146	245	266	217
1997:												
Official series	203	295	347	294	259	226	296	71	431	318	292	324
Net strike activity	0	0	–3	4	7	–5	0	175	–183	–1	0	0
Series excluding strikes	203	295	344	298	266	221	296	246	248	317	292	324
1998:												
Official series	290	193	182	244	353	217	99	378	244	208	262	347
Net strike activity	–1	3	0	0	0	10	0	–12	6	–2	2	–1
Series excluding strikes	289	196	182	244	353	227	99	366	250	206	264	346
1999:												
Official series	177	420	171	228	95	253	268	159	208	258	265	250
Net strike activity	–1	–1	0	7	0	0	0	–7	0	–1	0	0
Series excluding strikes	176	419	171	235	95	253	268	152	208	257	265	250
2000:												
Official series	349	95	527	414	231	–	–	–	–	–	–	–
Net strike activity	0	15	–15	5	–3	–	–	–	–	–	–	–
Series excluding strikes	349	110	512	419	228	–	–	–	–	–	–	–

NOTE: Dash indicates data not available.

wishes to compare estimates of current employment growth with monthly changes in earlier years, because strikes can significantly mask other economic activity and introduce volatility into the data.

AN UNDERSTANDING OF THE TREATMENT OF STRIKES in the CES employment data is necessary for a correct analysis of monthly movements. Depending on its timing compared with the survey reference period, a strike can have various impacts on employment, average weekly hours, and average hourly earnings. Further, if the company affected by the work stoppage has weekly hours or hourly earnings that differ significantly from the industry average, the strike can have a large impact on average weekly hours or hourly earnings for the industry. Similarly, if the industry involved in the strike has hours and earnings that differ significantly from higher level aggregates, the strike can have an impact on the higher level estimates of average hours or hourly earnings.

Large strikes are widely reported in newspapers around the country. Information from such public sources is used to compile a summary of strike activity each month. This report is made available on the Internet. The purpose of the summary is to provide an early indication of the direct impact that strikes involving at least 1,000 workers will have on the employment estimates, which are released the following week.

In addition to their direct impact, large strikes sometimes have secondary effects, as, for example, when they oblige other plants to close because parts are in short supply. When the magnitude of significant secondary strike effects is known, like the direct effects, these secondary effects are discussed in the monthly news release *The Employment Situation*, the periodical *Employment and Earnings*, and other BLS publications. □

Notes

[1] The Bureau of Labor Statistics cooperates with State employment security agencies in the CES survey to collect data each month on employment, hours, and earnings from a sample of about 380,000 nonfarm establishments (including government). From these data, a large number of employment, hours, and earnings series in considerable industry and geographic detail are prepared and published every month. The employment data include series on all employees, women workers, and production or nonsupervisory workers. Hours and earnings data include average weekly hours, average weekly overtime hours, and average hourly and weekly earnings. The CES is the source of the "payroll," or "establishment," data that appear in the *Employment Situation* news release, usually on the first Friday of each month, with data for the previous month.

[2] This approach differs from that of the Current Population Survey, which counts as employed all civilian workers who have a job during the survey reference period, including those "with a job, but not at work"—the category that strikers are in.

[3] The CES program will convert from the SIC system to the North American Industrial Classification System (NAICS) in June 2003.

[4] The fact that the decline was less than 640,000 indicates that without the strike, the four-digit SIC industry would have gained 5,000 jobs.

[5] The strike report, which is generally released the Friday before the *Employment Situation* is released, is available on **http://stats.bls.gov/ceshome.htm**, or it may be accessed by calling (202) 691-6555, the general CES information number.

Return on training investment

Knowledge of the rate of return on an employer's investment in employee training is beneficial for two main reasons: it guides firms in making training investment decisions and also helps policymakers decide on subsidies for private investments. In the article "Measuring the Employer's Return on Investments in Training: Evidence from the Literature," (*Industrial Relations*, July 2000) Ann P. Bartel of the Columbia University Graduate School of Business and the National Bureau of Economic Research (NBER) maintains that if the expected return on investments is underestimated, employers will overinvest. Also, she believes a company's return on investments in employee training may be higher than previously thought.

Bartel analyzed three components of the literature. The first dealt with large samples of firm-level or establishment-level data collected through mail or phone surveys. This component, however, provided little guidance on the rate of return. Training cost data were typically unavailable, diverse production processes may not have been modeled properly, and the bias from the endogeneity of the training decision may not have been entirely eliminated. In the second approach, the case study method, detailed data are gathered from one company to estimate the costs and returns from that company's training program. Here, the estimated rates of return rely on the assumption regarding the skill depreciation rate. "Assuming that skills depreciate 5 percent per year, the estimated rates of return range from 7 to 50 percent," Bartel writes. The third component is company-sponsored case studies. Even though this approach has the potential to address the deficiences of the previous two components, the fact remains that few companies calculate the return on investments in employee training. And most of those that do, according to the author, use faulty methodologies that preclude relying on their results. Two well-conceived case studies reviewed by Bartel report return on investments in the range of 100 to 200 percent.

Many companies do not undertake the huge effort needed to evaluate a training program. Therefore, the companies that maintain detailed records on employee performance and characteristics are best suited for analysis. Bartel concludes that "[I]f lack of information on the ROI [rate on investments] is one cause of possible underinvestment in employee training, helping firms to measure the returns on their training investments could help resolve the underinvestment problem."

Inflation uncertainty and labor contracts

Recent labor contract renewals have produced longer contracts than in the past. In "Uncertainty and Labor Contract Duration," (NBER Working Paper 7731), Robert Rich and Joseph Tracy of the Federal Reserve Bank of New York list several such cases. For example, the Big Three auto makers and the United Auto Workers signed national contracts that were 4 years in duration in their latest round of negotiations—this was a break from a long tradition of 3-year contracts.

In their research on contracts and uncertainty, Rich and Tracy studied Bureau of Labor Statistics data for 1970–95 on major union contracts. (A contract is major if it covers at least 1,000 workers.) They observe that, while the *median* contract length has been fairly constant in the past few decades, the *longest* contracts have gotten longer. Contracts in the 90th percentile of duration have shown an upward trend since the mid-1980s.

Some of the theoretical literature on labor contracts and uncertainty suggests that contract duration should be inversely related to uncertainty. Other literature indicates that certain sources of uncertainty may cause workers to seek more insurance against income fluctuations through longer contracts.

In their analysis, Rich and Tracy explore the relationship between contract duration and several measures of inflation uncertainty. Using their preferred measure of inflation uncertainty, they find that decreases in inflation uncertainty are associated with longer contracts. They also find that this relationship extends to broader measures of uncertainty.

Downsizing deconstructed

Downsizing differs from traditional layoffs in that the job cuts do not appear to result from drops in demand, but instead seem to be driven by a desire for operating efficiencies. In "Examining the Incidence of Downsizing and its Effect on Establishment Performance," (NBER Working Paper 7742), Peter Cappelli of the University of Pennsylvania examines the causes and consequences of downsizing.

Downsizing is a relatively recent phenomenon—Cappelli notes that the concept of downsizing appeared after the recession of the early 1980s. Surveys by the American Management Association indicated that downsizing increased in the early to mid-1990s, even as the economy was expanding.

For his analysis, Cappelli used data from the Educational Quality of the Workforce National Employer Survey. This survey was conducted by the U.S. Bureau of the Census for the National Center on the Educational Quality of the Workforce in 1994 and 1997.

Cappelli found that unionization and severance pay are associated with more downsizing. He also observed that establishments with a higher percentage of managers downsize more than those with a higher percentage of production workers; this is consistent with an attempt to move toward a flatter structure in the organization. Regarding the consequences of downsizing, Cappelli's analysis shows that downsizing reduces labor cost per employee but it also reduces sales per employee. □

Union history

Maritime Solidarity, Pacific Coast Unionism: 1929–1938. By Ottilie Markholt. Tacoma, WA, Pacific Coast Maritime History Committee, 1999, 461 pp. $19.95.

From a lifetime of work in the labor movement as both a chronicler and an activist, Ottilie Markholt has assembled a massive and detailed historical log of Pacific Coast maritime unionism in its most explosive years. Almost all of the men and women who lived and struggled in that era have since passed away, so swiftly does history move along. Thus, Markholt's book is a valuable recapture of maritime history drawn from oral histories, union journals, daily newspapers, employers' internal documents, and government records.

From 1939 to 1942, Markholt worked on compiling a history of the Sailors' Union of the Pacific. Realizing how incomplete the history of one union alone would be, for the next half century, she pursued the history of all West Coast maritime unions, their cycles of victory and defeat, their interunion conflicts, their battles with employers, as well as the role played by government, from the President of the United States to the local sheriff.

The author was in a unique position to observe and record this chronicle: first, she had worked as a Communist Party organizer; and second, later in life, she served as an office secretary to both a labor council and an office workers' union. The early years of the 20th century saw numerous struggles between labor and management, and Markholt came to share with the maritime workers their disillusionment with the ideals espoused by communists and their frustration with the failure of unions. Hope for "One Big Union" died early.

But the book is not a moralizing discourse of the author's beliefs or ultimate disenchantment with the movement. It is a straightforward and mostly-objective account of the unions' leadership and the interaction among rank-and-file ships' crews, longshoremen, and waterfront teamsters.

In seaports extending northward from San Diego to Seattle, workers had struggled to build unions since well before 1929. The book documents the efforts of seamen and longshoremen, who were working throughout the last decades of the 19th century to gain control over their general working conditions, such as the means by which workers were hired, the size of the work crew, their hours of work, and their compensation. The poorly-paid seamen suffered greatly: they were ill-fed, they lived in crowded, vermin-infested spaces, they were ruled by tyrannical officers, and they were ignored by the law and the government. Those who protested were blacklisted.

They first organized in March of 1885, and by 1919, longshoremen had successfully unionized all West Coast seaports. But by the end of the so-called Roaring 20s—after a series of broken strikes—only Tacoma remained a union port. For longshoremen and seamen it was back to fink halls, blacklists, corruption, and selling of jobs. The Great Depression only made conditions worse. During this time period, Markholt reports, neither cooperation with the employers, which was the route of the seamen's union, nor the tactics of either the IWW Wobblies or the communists could prevent erosion of wages and working conditions. The communists sought, primarily, to advance the party; the Wobblies refused to sign contracts, choosing instead the guerrilla warfare of job actions.

Markholt weaves well the growing sense of outrage and anguish that brought about the historic 1934 strike, which ended the corrupt practices of the fink hall and its accompanying blacklisting fink book. Despite employer threats of retribution, seamen left their ships, longshoremen respected their lines, and teamsters refused to haul cargo. The employers responded with strikebreakers, resulting in the murder of unarmed pickets. Thousands of strikers fought pitched battles against a police force armed with tear gas and riot guns. When the government finally called out the National Guard, the unions issued a general strike call. Workers in other industries, sympathetic to labor's cause, closed down lumber and flour mills, logging camps, and scores of other types of workplaces. More than 100,000 workers struck, and eventually maritime operations on the West Coast were shut down.

Success brought creation of the Maritime Federation of the Pacific. The unions declared that unified action would be taken against employers whenever any member union was attacked. But there would be no political action, no labor party. Federation solidarity was demonstrated in the 3-month long 1936–37 strike in which all of the maritime unions gained many of their demands. But where the employers failed, a series of expulsions and interunion conflicts shredded the federation and ended its effectiveness.

Emergence of the Congress of Industrial Organization (CIO) transformed the West Coast unions, as each one chose sides with either the American Federation of Labor (AFL) or the CIO, a situation Markholt reports in painstaking detail. The end result was the dissolution of the Maritime Federation.

Maritime Solidarity in many ways parallels another labor history project, *Working Detroit,* by Steve Babson. That inland city's waterfront handled the lumber, the coal, and the iron ore that created the industrial era of the motor car. The Great Lakes' maritime industry soon became captive to the interests of the steel and auto companies, while ashore, the craft unions gradually dissolved into the rote assembly lines of auto production. There, too, the struggle for unionism was waged amid strikes and bloodshed. Both books take particular pains to include the extraordinary problems of African-American

unionists. *Working Detroit* also includes the struggles of the woman industrial worker.

The end of World War II brought grave, new challenges to West Coast maritime unions: the massive downsizing of the U.S. merchant fleet and cargo containerization, to name two. Hopefully, the post-1939 era will have as capable and dedicated a chronicler as Ottilie Markholt.

—Ray Denison
Formerly with the AFL-CIO

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Notes on labor statistics 46

Comparative indicators

1. Labor market indicators 56
2. Annual and quarterly percent changes in compensation, prices, and productivity 57
3. Alternative measures of wages and compensation changes 57

Labor force data

4. Employment status of the population, seasonally adjusted 58
5. Selected employment indicators, seasonally adjusted 59
6. Selected unemployment indicators, seasonally adjusted 60
7. Duration of unemployment, seasonally adjusted 61
8. Unemployed persons by reason for unemployment, seasonally adjusted 61
9. Unemployment rates by sex and age, seasonally adjusted 62
10. Unemployment rates by States, seasonally adjusted 63
11. Employment of workers by States, seasonally adjusted 63
12. Employment of workers by industry, seasonally adjusted 64
13. Average weekly hours by industry, seasonally adjusted 66
14. Average hourly earnings by industry, seasonally adjusted 67
15. Average hourly earnings by industry 68
16. Average weekly earnings by industry 69
17. Diffusion indexes of employment change, seasonally adjusted 70
18. Annual data: Employment status of the population 71
19. Annual data: Employment levels by industry 71
20. Annual data: Average hours and earnings levels by industry 72

Labor compensation and collective bargaining data

21. Employment Cost Index, compensation, by occupation and industry group 73
22. Employment Cost Index, wages and salaries, by occupation and industry group 75
23. Employment Cost Index, benefits, private industry workers, by occupation and industry group 76
24. Employment Cost Index, private nonfarm workers, by bargaining status, region, and area size 77
25. Participants in benefit plans, medium and large firms 78

Labor compensation and collective bargaining data—continued

26. Participants in benefits plans, small firms and government 79
27. Work stoppages involving 1,000 workers or more 80

Price data

28. Consumer Price Index: U.S. city average, by expenditure category and commodity and service groups 81
29. Consumer Price Index: U.S. city average and local data, all items 84
30. Annual data: Consumer Price Index, all items and major groups 85
31. Producer Price Indexes by stage of processing 86
32. Producer Price Indexes for the net output of major industry groups 87
33. Annual data: Producer Price Indexes by stage of processing 88
34. U.S. export price indexes by Standard International Trade Classification 89
35. U.S. import price indexes by Standard International Trade Classification 90
36. U.S. export price indexes by end-use category 91
37. U.S. import price indexes by end-use category 92
38. U.S.international price indexes for selected categories of services 92

Productivity data

39. Indexes of productivity, hourly compensation, and unit costs, data seasonally adjusted 93
40. Annual indexes of multifactor productivity 94
41. Annual indexes of productivity, hourly compensation, unit costs, and prices 95
42. Annual indexes of output per hour for selected industries 96

International comparisons data

43. Unemployment rates in nine countries, data seasonally adjusted 99
44. Annual data: Employment status of the civilian working-age population, 10 countries 100
45. Annual indexes of productivity and related measures, 12 countries 101

Injury and illness data

46. Annual data: Occupational injury and illness incidence rates 102
47. Fatal occupational injuries by event or exposure 104

This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force; employment; unemployment; labor compensation; consumer, producer, and international prices; productivity; international comparisons; and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described; key definitions are given; notes on the data are set forth; and sources of additional information are cited.

General notes

The following notes apply to several tables in this section:

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as "seasonally adjusted." (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of past experience. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years.

Seasonally adjusted data appear in tables 1–14, 16–17, 39, and 43. Seasonally adjusted labor force data in tables 1 and 4–9 were revised in the February 2000 issue of the *Review*. Seasonally adjusted establishment survey data shown in tables 1, 12–14 and 16–17 were revised in the July 2000 *Review* and reflect the experience through March 2000. A brief explanation of the seasonal adjustment methodology appears in "Notes on the data."

Revisions in the productivity data in table 45 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month-to-month and quarter-to-quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All-Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the "real" earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of $3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is $2 ($3/150 x 100 = $2). The $2 (or any other resulting values) are described as "real," "constant," or "1982" dollars.

Sources of information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. Definitions of each series and notes on the data are contained in later sections of these Notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Bulletin 2490. Users also may wish to consult *Major Programs of the Bureau of Labor Statistics*, Report 919. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule appearing on the back cover of this issue.

More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in the Bureau's monthly publication, *Employment and Earnings*. Historical unadjusted and seasonally adjusted data from the household survey are available on the Internet:

http://stats.bls.gov/cpshome.htm

Historically comparable unadjusted and seasonally adjusted data from the establishment survey also are available on the Internet:

http://stats.bls.gov/ceshome.htm

Additional information on labor force data for areas below the national level are provided in the BLS annual report, *Geographic Profile of Employment and Unemployment*.

For a comprehensive discussion of the Employment Cost Index, see *Employment Cost Indexes and Levels, 1975–95*, BLS Bulletin 2466. The most recent data from the Employee Benefits Survey appear in the following Bureau of Labor Statistics bulletins: *Employee Benefits in Medium and Large Firms; Employee Benefits in Small Private Establishments;* and *Employee Benefits in State and Local Governments*.

More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report* and *Producer Price Indexes*. For an overview of the 1998 revision of the CPI, see the December 1996 issue of the *Monthly Labor Review*. Additional data on international prices appear in monthly news releases.

Listings of industries for which productivity indexes are available may be found on the Internet:

http://stats.bls.gov/iprhome.htm

For additional information on international comparisons data, see *International Comparisons of Unemployment*, BLS Bulletin 1979.

Detailed data on the occupational injury and illness series are published in *Occupational Injuries and Illnesses in the United States, by Industry*, a BLS annual bulletin.

Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

Symbols

n.e.c. = not elsewhere classified.
n.e.s. = not elsewhere specified.
p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.
r = revised. Generally, this revision reflects the availability of later data, but also may reflect other adjustments.

Comparative Indicators

(Tables 1–3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

Labor market indicators include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-to-population ratio, and unemployment rates for major demographic groups based on the Current Population ("household") Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonfarm payroll data. The Employment Cost Index (compensation), by major sector and by bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in table 2.

Measures of rates of change of compensation and wages from the Employment Cost Index program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in consumer prices for all urban consumers; producer prices by stage of processing; overall prices by stage of processing; and overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

Alternative measures of wage and compensation rates of change, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

Notes on the data

Definitions of each series and notes on the data are contained in later sections of these notes describing each set of data.

Employment and Unemployment Data

(Tables 1; 4–20)

Household survey data

Description of the series

EMPLOYMENT DATA in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 50,000 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons include (1) all those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population. Persons **not in the labor force** are those not classified as employed or unemployed. This group includes discouraged workers, defined as persons who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify. The **civilian noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The **civilian labor force participation** rate is the proportion of the civilian noninstitutional population that is in the labor force. The **employment-population ratio** is employment as a percent of the civilian noninstitutional population.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the intercensal years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on the various data series appears in the Explanatory Notes of *Employment and Earnings*.

Data beginning in 2000 are not strictly comparable with data for 1999 and earlier years because of the introduction of revised population controls. Additional information appears in the February 2000 issue of *Employment and Earnings*.

Labor force data in tables 1 and 4–9 are seasonally adjusted. Since January 1980, national labor force data have been seasonally adjusted with a procedure called X-11 ARIMA which was developed at Statistics Canada as an extension of the standard X-11 method previously used by BLS. A detailed description of the procedure appears in the X-11 *ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum (Statistics Canada, Catalogue No. 12-564E, January 1983).

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical seasonally adjusted data usually are revised for only the most recent 5 years. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

FOR ADDITIONAL INFORMATION on national household survey data, contact the Division of Labor Force Statistics: (202) 691–6378.

Establishment survey data

Description of the series

EMPLOYMENT, HOURS, AND EARNINGS DATA in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by about 300,000 establishments representing all industries except agriculture. Industries are classified in accordance with the 1987 *Standard Industrial Classification (SIC) Manual*. In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th day of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted in each establishment which reports them.

Production workers in manufacturing include working supervisors and nonsupervisory workers closely associated with production operations. Those workers mentioned in tables 11–16 include production workers in manufacturing and mining; construction workers in construction; and nonsupervisory workers in the following industries: transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for about four-fifths of the total em-

ployment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received, and are different from standard or scheduled hours. **Overtime hours** represent the portion of average weekly hours which was in excess of regular hours and for which overtime premiums were paid.

The **Diffusion Index** represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. Data are centered within the span. Table 17 provides an index on private nonfarm employment based on 356 industries, and a manufacturing index based on 139 industries. These indexes are useful for measuring the dispersion of economic gains or losses and are also economic indicators.

Notes on the data

Establishment survey data are annually adjusted to comprehensive counts of employment (called "benchmarks"). The latest adjustment, which incorporated March 1999 benchmarks, was made with the release of May 2000 data, published in the July 2000 issue of the *Review*. Coincident with the benchmark adjustment, historical seasonally adjusted data were revised to reflect updated seasonal factors. Unadjusted data from April 1999 forward and seasonally adjusted data from January 1996 forward are subject to revision in future benchmarks.

In addition to the routine benchmark revisions and updated seasonal factors introduced with the release of the May 2000 data, all estimates for the wholesale trade division from April 1998 forward were revised to incorporate a new sample design. This represented the first major industry division to convert to a probability-based sample under a 4-year phase-in plan for the establishment survey sample redesign project. For additional information, see the the June 2000 issue of *Employment and Earnings*.

Revisions in State data (table 11) occurred with the publication of January 2000 data.

Beginning in June 1996, the BLS uses the X-12 ARIMA methodology to seasonally adjust establishment survey data. This procedure, developed by the Bureau of the Census, controls for the effect of varying survey intervals (also known as the 4- versus 5-week effect), thereby providing improved measurement of over-the-month changes and underlying economic trends. Revisions of data, usually for the most recent 5-year period, are made once a year coincident with the benchmark revisions.

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review*). When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Thus, fourth-quarter data are published as preliminary in January and February and as final in March.

FOR ADDITIONAL INFORMATION on establishment survey data, contact the Division of Monthly Industry Employment Statistics: (202) 691–6555.

Unemployment data by State

Description of the series

Data presented in this section are obtained from the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions, and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act. Seasonally adjusted unemployment rates are presented in table 10. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

Notes on the data

Data refer to State of residence. Monthly data for all States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates are revised to new population controls, usually with publication of January estimates, and benchmarked to annual average CPS levels.

FOR ADDITIONAL INFORMATION on data in this series, call (202) 691–6392 (table 10) or (202) 691–6559 (table 11).

Compensation and Wage Data

(Tables 1–3; 21–27)

COMPENSATION AND WAGE DATA are gathered by the Bureau from business establishments, State and local governments, labor unions, collective bargaining agreements on file with the Bureau, and secondary sources.

Employment Cost Index

Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It uses a fixed market basket of labor—similar in concept to the Consumer Price Index's fixed market basket of goods and services—to measure change over time in employer costs of employing labor.

Statistical series on total compensation costs, on wages and salaries, and on benefit costs are available for private nonfarm workers excluding proprietors, the self-employed, and household workers. The total compensation costs and wages and salaries series are also available for State and local government workers and for the civilian nonfarm economy, which consists of private industry and State and local government workers combined. Federal workers are excluded.

The Employment Cost Index probability sample consists of about 4,400 private nonfarm establishments providing about 23,000 occupational observations and 1,000 State and local government establishments providing 6,000 occupational observations selected to represent total employment in each sector. On average, each reporting unit provides wage and compensation information on five well-specified occupations. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Beginning with June 1986 data, fixed employment weights from the 1980 Census of Population are used each quarter to calculate the civilian and private indexes and the index for State and local governments. (Prior to June 1986, the employment weights are from the 1970 Census of Population.) These fixed weights, also used to derive all of the industry and occupation series indexes, ensure that changes in these indexes reflect only changes in compensation, not employment shifts among indus-

tries or occupations with different levels of wages and compensation. For the bargaining status, region, and metropolitan/non-metropolitan area series, however, employment data by industry and occupation are not available from the census. Instead, the 1980 employment weights are reallocated within these series each quarter based on the current sample. Therefore, these indexes are not strictly comparable to those for the aggregate, industry, and occupation series.

Definitions

Total compensation costs include wages, salaries, and the employer's costs for employee benefits.

Wages and salaries consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

Benefits include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

Notes on the data

The Employment Cost Index for changes in wages and salaries in the private nonfarm economy was published beginning in 1975. Changes in total compensation cost—wages and salaries and benefits combined—were published beginning in 1980. The series of changes in wages and salaries and for total compensation in the State and local government sector and in the civilian nonfarm economy (excluding Federal employees) were published beginning in 1981. Historical indexes (June 1981=100) are available on the Internet:

http://stats.bls.gov/ecthome.htm

FOR ADDITIONAL INFORMATION on the Employment Cost Index, contact the Office of Compensation Levels and Trends: (202) 691–6199.

Employee Benefits Survey

Description of the series

Employee benefits data are obtained from the Employee Benefits Survey, an annual survey of the incidence and provisions of selected benefits provided by employers. The survey collects data from a sample of approximately 9,000 private sector and State and local government establishments. The data are presented as a percentage of employees who participate in a certain benefit, or as an average benefit provision (for example, the average number of paid holidays provided to employees per year). Selected data from the survey are presented in table 25 for medium and large private establishments and in table 26 for small private establishments and State and local government.

The survey covers paid leave benefits such as holidays and vacations, and personal, funeral, jury duty, military, family, and sick leave; short-term disability, long-term disability, and life insurance; medical, dental, and vision care plans; defined benefit and defined contribution plans; flexible benefits plans; reimbursement accounts; and unpaid family leave.

Also, data are tabulated on the incidence of several other benefits, such as severance pay, child-care assistance, wellness programs, and employee assistance programs.

Definitions

Employer-provided benefits are benefits that are financed either wholly or partly by the employer. They may be sponsored by a union or other third party, as long as there is some employer financing. However, some benefits that are fully paid for by the employee also are included. For example, long-term care insurance and postretirement life insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Participants are workers who are covered by a benefit, whether or not they use that benefit. If the benefit plan is financed wholly by employers and requires employees to complete a minimum length of service for eligibility, the workers are considered participants whether or not they have met the requirement. If workers are required to contribute towards the cost of a plan, they are considered participants only if they elect the plan and agree to make the required contributions.

Defined benefit pension plans use predetermined formulas to calculate a retirement benefit (if any), and obligate the employer to provide those benefits. Benefits are generally based on salary, years of service, or both.

Defined contribution plans generally specify the level of employer and employee contributions to a plan, but not the formula for determining eventual benefits. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts.

Tax-deferred savings plans are a type of defined contribution plan that allow participants to contribute a portion of their salary to an employer-sponsored plan and defer income taxes until withdrawal.

Flexible benefit plans allow employees to choose among several benefits, such as life insurance, medical care, and vacation days, and among several levels of coverage within a given benefit.

Notes on the data

Surveys of employees in medium and large establishments conducted over the 1979–86 period included establishments that employed at least 50, 100, or 250 workers, depending on the industry (most service industries were excluded). The survey conducted in 1987 covered only State and local governments with 50 or more employees. The surveys conducted in 1988 and 1989 included medium and large establishments with 100 workers or more in private industries. All surveys conducted over the 1979–89 period excluded establishments in Alaska and Hawaii, as well as part-time employees.

Beginning in 1990, surveys of State and local governments and small private establishments were conducted in even-numbered years, and surveys of medium and large establishments were conducted in odd-numbered years. The small establishment survey includes all private nonfarm establishments with fewer than 100 workers, while the State and local government survey includes all governments, regardless of the number of workers. All three surveys include full- and part-time workers, and workers in all 50 States and the District of Columbia.

FOR ADDITIONAL INFORMATION on the Employee Benefits Survey, contact the Office of Compensation Levels and Trends on the Internet:

http://stats.bls.gov/ebshome.htm

Work stoppages

Description of the series

Data on work stoppages measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring during the month (or year), the number of workers involved, and the amount of work time lost because of stoppage. These data are presented in table 27.

Data are largely from a variety of published sources and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

Definitions

Number of stoppages: The number of strikes and lockouts involving 1,000 workers or more and lasting a full shift or longer.

Workers involved: The number of workers directly involved in the stoppage.

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

Days of idleness as a percent of estimated working time: Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

FOR ADDITIONAL INFORMATION on work stoppages data, contact the Office of Compensation and Working Conditions: (202) 691–6282, or the Internet:

http://stats.bls.gov/cbahome.htm

Price Data

(Tables 2; 28–38)

PRICE DATA are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period—1982 = 100 for many Producer Price Indexes, 1982–84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

Consumer Price Indexes

Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1993–95 buying habits of about 87 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 23,000 retail establishments and 5,800 housing units in 87 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 14 major urban centers are presented in table 29. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are meaured for the CPI-U. A rental equivalence method replaced the asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-W. The central purpose of the change was to separate shelter costs from the investment component of home-ownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes. An updated CPI-U and CPI-W were introduced with release of the January 1987 and January 1998 data.

FOR ADDITIONAL INFORMATION on consumer prices, contact the Division of Consumer Prices and Price Indexes: (202) 691–7000.

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the Standard Industrial Classification (SIC) and the product code extension of the SIC developed by the U.S. Bureau of the Census.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1992, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1987. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

FOR ADDITIONAL INFORMATION on producer prices, contact the Division of Industrial Prices and Price Indexes: (202) 691–7705.

International Price Indexes

Description of the series

The **International Price Program** produces monthly and quarterly export and import price indexes for nonmilitary goods traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts; it includes corporations, businesses, and individuals, but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected primarily by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports and at either the foreign border or the U.S.

border for imports. For nearly all products, the prices refer to transactions completed during the first week of the month. Survey respondents are asked to indicate all discounts, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined according to the five-digit level of detail for the Bureau of Economic Analysis End-use Classification (SITC), and the four-digit level of detail for the Harmonized System. Aggregate import indexes by country or region of origin are also available.

BLS publishes indexes for selected categories of internationally traded services, calculated on an international basis and on a balance-of-payments basis.

Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. Price relatives are assigned equal importance within each harmonized group and are then aggregated to the higher level. The values assigned to each weight category are based on trade value figures compiled by the Bureau of the Census. The trade weights currently used to compute both indexes relate to 1990.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

For the export price indexes, the preferred pricing is f.a.s. (free alongside ship) U.S. port of exportation. When firms report export prices f.o.b. (free on board), production point information is collected which enables the Bureau to calculate a shipment cost to the port of exportation. An attempt is made to collect two prices for imports. The first is the import price f.o.b. at the foreign port of exportation, which is consistent with the basis for valuation of imports in the national accounts. The second is the import price c.i.f.(costs, insurance, and freight) at the U.S. port of importation, which also includes the other costs associated with bringing the product to the U.S. border. It does not, however, include duty charges. For a given product, only one price basis series is used in the construction of an index.

FOR ADDITIONAL INFORMATION on international prices, contact the Division of International Prices: (202) 691–7155.

Productivity Data

(Tables 2; 39–42)

Business sector and major sectors

Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per hour, output per unit of labor input, or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

Definitions

Output per hour of all persons (labor productivity) is the quantity of goods and services produced per hour of labor input. **Output per unit of capital services** (capital productivity) is the quantity of goods and services produced per unit of capital services input. **Multifactor productivity** is the quantity of goods and services produced per combined inputs. For private business and private nonfarm business, inputs include labor and capital units. For manufacturing, inputs include labor, capital, energy, non-energy materials, and purchased business services.

Compensation per hour is total compensation divided by hours at work. Total compensation equals the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, plus an estimate of these payments for the self-employed (except for nonfinancial corporations in which there are no self-employed). **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

Unit labor costs are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current-dollar value of output and dividing by output.

Unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits with inventory valuation and capital consumption adjustments per unit of output.

Hours of all persons are the total hours at work of payroll workers, self-employed persons, and unpaid family workers.

Labor inputs are hours of all persons adjusted for the effects of changes in the education and experience of the labor force.

Capital services are the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

Combined units of labor and capital inputs are derived by combining changes in labor and capital input with weights which represent each component's share of total cost. Combined units of labor, capital, energy, materials, and purchased business services are similarly derived by combining changes in each input with weights that represent each input's share of total costs. The indexes for each input and for combined units are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

Notes on the data

Business sector output is an annually-weighted index constructed by excluding from real gross domestic product (GDP) the following outputs: general government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Nonfarm business also excludes farming. Private business and private nonfarm business further exclude government enterprises. The measures are supplied by the U.S. Department of Commerce's Bureau of Economic Analysis. Annual estimates of manufacturing sectoral output are produced by the Bureau of Labor Statistics. Quarterly manufacturing output indexes from the Federal Reserve Board are adjusted to these annual output measures by the BLS. Compensation data are developed from data of the Bureau of Economic Analysis and the Bureau of Labor Statistics. Hours data are developed from data of the Bureau of Labor Statistics.

The productivity and associated cost measures in tables 39–42 describe the relation-

ship between output in real terms and the labor and capital inputs involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input.

Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; shifts in the composition of the labor force; capital investment; level of output; changes in the utilization of capacity, energy, material, and research and development; the organization of production; managerial skill; and characteristics and efforts of the work force.

FOR ADDITIONAL INFORMATION on this productivity series, contact the Division of Productivity Research: (202) 691–5606.

Industry productivity measures

Description of the series

The BLS industry productivity data supplement the measures for the business economy and major sectors with annual measures of labor productivity for selected industries at the three- and four-digit levels of the Standard Industrial Classification system. The industry measures differ in methodology and data sources from the productivity measures for the major sectors because the industry measures are developed independently of the National Income and Product Accounts framework used for the major sector measures.

Definitions

Output per hour is derived by dividing an index of industry output by an index of labor input. For most industries, **output** indexes are derived from data on the value of industry output adjusted for price change. For the remaining industries, output indexes are derived from data on the physical quantity of production.

The **labor input** series consist of the hours of all employees (production and nonproduction workers), the hours of all persons (paid employees, partners, proprietors, and unpaid family workers), or the number of employees, depending upon the industry.

Notes on the data

The industry measures are compiled from data produced by the Bureau of Labor Statistics, the Departments of Commerce, Interior, and Agriculture, the Federal Reserve Board, regulatory agencies, trade associations, and other sources.

For most industries, the productivity indexes refer to the output per hour of all employees. For some transportation industries, only indexes of output per employee are prepared. For some trade and service industries, indexes of output per hour of all persons (including self-employed) are constructed.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Industry Productivity Studies: (202) 691–5618.

International Comparisons

(Tables 43–45)

Labor force and unemployment

Description of the series

Tables 43 and 44 present comparative measures of the labor force, employment, and unemployment—approximating U.S. concepts—for the United States, Canada, Australia, Japan, and several European countries. The unemployment statistics (and, to a lesser extent, employment statistics) published by other industrial countries are not, in most cases, comparable to U.S. unemployment statistics. Therefore, the Bureau adjusts the figures for selected countries, where necessary, for all known major definitional differences. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country.

Definitions

For the principal U.S. definitions of the **labor force**, **employment**, and **unemployment**, see the Notes section on Employment and Unemployment Data: Household survey data.

Notes on the data

The adjusted statistics have been adapted to the age at which compulsory schooling ends in each country, rather than to the U.S. standard of 16 years of age and older. Therefore, the adjusted statistics relate to the population aged 16 and older in France, Sweden, and the United Kingdom; 15 and older in Canada, Australia, Japan, Germany, Italy from 1993 onward, and the Netherlands; and 14 and older in Italy prior to 1993. The institutional population is included in the denominator of the labor force participation rates and employment-population ratios for Japan and Germany; it is excluded for the United States and the other countries.

In the U.S. labor force survey, persons on layoff who are awaiting recall to their jobs are classified as unemployed. European and Japanese layoff practices are quite different in nature from those in the United States; therefore, strict application of the U.S. definition has not been made on this point. For further information, see *Monthly Labor Review*, December 1981, pp. 8–11.

The figures for one or more recent years for France, Germany, Italy, the Netherlands, and the United Kingdom are calculated using adjustment factors based on labor force surveys for earlier years and are considered preliminary. The recent-year measures for these countries, therefore, are subject to revision whenever data from more current labor force surveys become available.

There are breaks in the data series for the United States (1990, 1994, 1997, 1998), France (1992), Italy (1991, 1993), the Netherlands (1988), and Sweden (1987).

For the United States, the break in series reflects a major redesign of the labor force survey questionnaire and collection methodology introduced in January 1994. Revised population estimates based on the 1990 census, adjusted for the estimated undercount, also were incorporated. In 1996, previously published data for the 1990–93 period were revised to reflect the 1990 census-based population controls, adjusted for the undercount. In 1997, revised population controls were introduced into the household survey. Therefore, the data are not strictly comparable with prior years. In 1998, new composite estimation procedures and minor revisions in population controls were introduced into the household survey. Therefore, the data are not strictly comparable with data for 1997 and earlier years. See the Notes section on Employment and Unemployment Data of this *Review*.

For France, the 1992 break reflects the substitution of standardized European Union Statistical Office (EUROSTAT) unemployment statistics for the unemployment data estimated according to the International Labor Office (ILO) definition and published in the Organization for Economic Cooperation and Development (OECD) annual yearbook and quarterly update. This change was made because the EUROSTAT data are more up-to-date than the OECD figures. Also, since 1992, the EUROSTAT definitions are closer to the U.S. definitions than they were in prior years. The impact of this revision was to lower the unemployment rate by 0.1 percentage point in 1992 and 1993, by 0.4 percentage point in 1994, and 0.5 percentage point in 1995.

For Italy, the 1991 break reflects a revision in the method of weighting sample data. The impact was to increase the unemployment rate by approximately 0.3 percentage point, from 6.6 to 6.9 percent in 1991.

In October 1992, the survey methodol-

ogy was revised and the definition of unemployment was changed to include only those who were actively looking for a job within the 30 days preceding the survey and who were available for work. In addition, the lower age limit for the labor force was raised from 14 to 15 years. (Prior to these changes, BLS adjusted Italy's published unemployment rate downward by excluding from the unemployed those persons who had not actively sought work in the past 30 days.) The break in the series also reflects the incorporation of the 1991 population census results. The impact of these changes was to raise Italy's adjusted unemployment rate by approximately 1.2 percentage points, from 8.3 to 9.5 percent in fourth-quarter 1992. These changes did not affect employment significantly, except in 1993. Estimates by the Italian Statistical Office indicate that employment declined by about 3 percent in 1993, rather than the nearly 4 percent indicated by the data shown in table 44. This difference is attributable mainly to the incorporation of the 1991 population benchmarks in the 1993 data. Data for earlier years have not been adjusted to incorporate the 1991 census results.

For the Netherlands, a new survey questionnaire was introduced in 1992 that allowed for a closer application of ILO guidelines. EUROSTAT has revised the Dutch series back to 1988 based on the 1992 changes. The 1988 revised unemployment rate is 7.6 percent; the previous estimate for the same year was 9.3 percent.

There have been two breaks in series in the Swedish labor force survey, in 1987 and 1993. Adjustments have been made for the 1993 break back to 1987. In 1987, a new questionnaire was introduced. Questions regarding current availability were added and the period of active workseeking was reduced from 60 days to 4 weeks. These changes lowered Sweden's 1987 unemployment rate by 0.4 percentage point, from 2.3 to 1.9 percent. In 1993, the measurement period for the labor force survey was changed to represent all 52 weeks of the year rather than one week each month and a new adjustment for population totals was introduced. The impact was to raise the unemployment rate by approximately 0.5 percentage point, from 7.6 to 8.1 percent. Statistics Sweden revised its labor force survey data for 1987–92 to take into account the break in 1993. The adjustment raised the Swedish unemployment rate by 0.2 percentage point in 1987 and gradually rose to 0.5 percentage point in 1992.

Beginning with 1987, BLS has adjusted the Swedish data to classify students who also sought work as unemployed. The impact of this change was to increase the adjusted unemployment rate by 0.1 percentage point in 1987 and by 1.8 percentage points in 1994, when unemployment was higher. In 1998, the adjusted unemployment rate had risen from 6.5 to 8.4 percent due to the adjustment to include students.

The net effect of the 1987 and 1993 changes and the BLS adjustment for students seeking work lowered Sweden's 1987 unemployment rate from 2.3 to 2.2 percent.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654.

Manufacturing productivity and labor costs

Description of the series

Table 45 presents comparative indexes of manufacturing labor productivity (output per hour), output, total hours, compensation per hour, and unit labor costs for the United States, Canada, Japan, and nine European countries. These measures are trend comparisons—that is, series that measure changes over time—rather than level comparisons. There are greater technical problems in comparing the levels of manufacturing output among countries.

BLS constructs the comparative indexes from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to all employed persons (wage and salary earners plus self-employed persons and unpaid family workers) in the United States, Canada, Japan, France, Germany, Norway, and Sweden, and to all employees (wage and salary earners) in the other countries.

Definitions

Output, in general, refers to value added in manufacturing from the national accounts of each country. However, the output series for Japan prior to 1970 is an index of industrial production, and the national accounts measures for the United Kingdom are essentially identical to their indexes of industrial production.

The 1977–97 output data for the United States are the gross product originating (value added) measures prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce. Comparable manufacturing output data currently are not available prior to 1977.

U.S. gross product originating is a chain-type annual-weighted series. (For more information on the U.S. measure, see Robert E. Yuskavage, "Improved Estimates of Gross Product by Industry, 1959–94," *Survey of Current Business*, August 1996, pp. 133–55.) The Japanese value added series is based upon one set of fixed price weights for the years 1970 through 1997. Output series for the other foreign economies also employ fixed price weights, but the weights are updated periodically (for example, every 5 or 10 years).

To preserve the comparability of the U.S. measures with those for other economies, BLS uses gross product originating in manufacturing for the United States for these comparative measures. The gross product originating series differs from the manufacturing output series that BLS publishes in its news releases on quarterly measures of U.S. productivity and costs (and that underlies the measures that appear in tables 39 and 41 in this section). The quarterly measures are on a "sectoral output" basis, rather than a value-added basis. Sectoral output is gross output less intrasector transactions.

Total labor hours refers to hours worked in all countries. The measures are developed from statistics of manufacturing employment and average hours. The series used for France (from 1970 forward), Norway, and Sweden are official series published with the national accounts. Where official total hours series are not available, the measures are developed by BLS using employment figures published with the national accounts, or other comprehensive employment series, and estimates of annual hours worked. For Germany, BLS uses estimates of average hours worked developed by a research institute connected to the Ministry of Labor for use with the national accounts employment figures. For the other countries, BLS constructs its own estimates of average hours.

Denmark has not published estimates of average hours for 1994–97; therefore, the BLS measure of labor input for Denmark ends in 1993.

Total compensation (labor cost) includes all payments in cash or in-kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. The measures are from the national accounts of each country, except those for Belgium, which are developed by BLS using statistics on employment, average hours, and hourly compensation. For Canada, France, and Sweden, compensation is increased to account for other significant taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for employment-related subsidies. Self-employed workers are included in the all-employed-persons measures by assuming that their hourly compensation is equal to the average for wage and salary employees.

Notes on the data

In general, the measures relate to total manufacturing as defined by the International Standard Industrial Classification. However, the measures for France (for all years) and Italy

(beginning 1970) refer to mining and manufacturing less energy-related products, and the measures for Denmark include mining and exclude manufacturing handicrafts from 1960 to 1966.

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national accounts and other statistics used for the long-term measures become available.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654.

Occupational Injury and Illness Data

(Tables 46–47)

Survey of Occupational Injuries and Illnesses

Description of the series

The Survey of Occupational Injuries and Illnesses collects data from employers about their workers' job-related nonfatal injuries and illnesses. The information that employers provide is based on records that they maintain under the Occupational Safety and Health Act of 1970. Self-employed individuals, farms with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies are excluded from the survey.

The survey is a Federal-State cooperative program with an independent sample selected for each participating State. A stratified random sample with a Neyman allocation is selected to represent all private industries in the State. The survey is stratified by Standard Industrial Classification and size of employment.

Definitions

Under the Occupational Safety and Health Act, employers maintain records of nonfatal work-related injuries and illnesses that involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.

Occupational injury is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or a single, instantaneous exposure in the work environment.

Occupational illness is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

Lost workday injuries and illnesses are cases that involve days away from work, or days of restricted work activity, or both.

Lost workdays include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both, because of an occupational injury or illness. BLS measures of the number and incidence rate of lost workdays were discontinued beginning with the 1993 survey. The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked, such as a Federal holiday, even though able to work.

Incidence rates are computed as the number of injuries and/or illnesses or lost work days per 100 full-time workers.

Notes on the data

The definitions of occupational injuries and illnesses are from *Recordkeeping Guidelines for Occupational Injuries and Illnesses* (U.S. Department of Labor, Bureau of Labor Statistics, September 1986).

Estimates are made for industries and employment size classes for total recordable cases, lost workday cases, days away from work cases, and nonfatal cases without lost workdays. These data also are shown separately for injuries. Illness data are available for seven categories: occupational skin diseases or disorders, dust diseases of the lungs, respiratory conditions due to toxic agents, poisoning (systemic effects of toxic agents), disorders due to physical agents (other than toxic materials), disorders associated with repeated trauma, and all other occupational illnesses.

The survey continues to measure the number of new work-related illness cases which are recognized, diagnosed, and reported during the year. Some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, often are difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent illnesses are believed to be understated in the survey's illness measure. In contrast, the overwhelming majority of the reported new illnesses are those which are easier to directly relate to workplace activity (for example, contact dermatitis and carpal tunnel syndrome).

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses per 100 equivalent full-time workers. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Full detail on the available measures is presented in the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics.*

Comparable data for more than 40 States and territories are available from the BLS Office of Safety, Health and Working Conditions. Many of these States publish data on State and local government employees in addition to private industry data.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration. Data from these organizations are included in both the national and State data published annually.

With the 1992 survey, BLS began publishing details on serious, nonfatal incidents resulting in days away from work. Included are some major characteristics of the injured and ill workers, such as occupation, age, gender, race, and length of service, as well as the circumstances of their injuries and illnesses (nature of the disabling condition, part of body affected, event and exposure, and the source directly producing the condition). In general, these data are available nationwide for detailed industries and for individual States at more aggregated industry levels.

FOR ADDITIONAL INFORMATION on occupational injuries and illnesses, contact the Office of Occupational Safety, Health and Working Conditions at (202) 691–6180, or access the Internet at:

http://www.bls.gov/oshhome.htm

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

In addition to private wage and salary workers, the self-employed, family members, and Federal, State, and local government workers are covered by the program. To be included in the fatality census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job.

Definition

A fatal work injury is any intentional or unintentional wound or damage to the body resulting in death from acute exposure to energy, such as heat or electricity, or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event or incident or series of events within a single workday or shift. Fatalities that occur during a person's commute to or from work are excluded from the census, as well as work-related illnesses, which can be difficult to identify due to long latency periods.

Notes on the data

Twenty-eight data elements are collected, coded, and tabulated in the fatality program, including information about the fatally injured worker, the fatal incident, and the machinery or equipment involved. Summary worker demographic data and event characteristics are included in a national news release that is available about 8 months after the end of the reference year. The Census of Fatal Occupational Injuries was initiated in 1992 as a joint Federal-State effort. Most States issue summary information at the time of the national news release.

FOR ADDITIONAL INFORMATION on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 691–6175, or the Internet at:

http://www.bls.gov/oshhome.htm

Bureau of Labor Statistics Internet

The Bureau of Labor Statistics World Wide Web site on the Internet contains a range of data on consumer and producer prices, employment and unemployment, occupational compensation, employee benefits, workplace injuries and illnesses, and productivity. The homepage can be accessed using any Web browser:

http://stats.bls.gov

Also, some data can be accessed through anonymous FTP or Gopher at

stats.bls.gov

1. Labor market indicators

Selected indicators	1998	1999	1998			1999				2000	
			II	III	IV	I	II	III	IV	I	II
Employment data											
Employment status of the civilian noninstitutionalized population (household survey):[1]											
Labor force participation rate	67.1	67.1	67.0	67.0	67.1	67.2	67.1	67.0	67.0	67.5	67.3
Employment-population ratio	64.1	64.3	64.1	64.0	64.1	64.3	64.2	64.2	64.3	64.7	64.6
Unemployment rate	4.5	4.2	4.4	4.5	4.4	4.3	4.3	4.2	4.1	4.1	4.0
Men	4.4	4.1	4.3	4.5	4.3	4.2	4.2	4.1	4.0	4.0	3.9
16 to 24 years	11.1	10.3	10.7	11.5	10.6	10.4	10.4	10.0	10.4	9.7	9.7
25 years and over	3.2	3.0	3.1	3.2	3.1	3.0	3.0	3.0	2.9	2.9	2.8
Women	4.6	4.3	4.6	4.5	4.6	4.4	4.4	4.4	4.2	4.2	4.1
16 to 24 years	9.8	9.5	9.7	9.9	9.4	9.8	9.2	9.5	9.4	9.6	9.0
25 years and over	3.6	3.3	3.6	3.5	3.6	3.4	3.4	3.3	3.1	3.2	3.2
Employment, nonfarm (payroll data), in thousands:[1]											
Total	125,865	128,786	125,486	126,180	126,967	127,800	128,430	129,073	129,783	130,626	131,537
Private sector	106,042	108,616	105,726	106,321	107,016	107,741	108,319	108,874	109,507	110,195	110,711
Goods-producing	25,414	25,482	25,427	25,408	25,469	25,488	25,454	25,459	25,524	25,680	25,704
Manufacturing	18,805	18,543	18,871	18,765	18,716	18,632	18,543	18,516	18,482	18,481	18,487
Service-producing	100,451	103,304	100,059	100,772	101,498	102,312	102,976	103,614	104,259	104,946	105,833
Average hours:											
Private sector	34.6	34.5	34.6	34.6	34.6	34.5	34.5	34.5	34.5	34.5	34.5
Manufacturing	41.7	41.7	41.7	41.7	41.7	41.6	41.7	41.8	41.7	41.7	41.7
Overtime	4.6	4.6	4.6	4.6	4.5	4.5	4.6	4.6	4.7	4.6	4.7
Employment Cost Index[2]											
Percent change in the ECI, compensation:											
All workers (excluding farm, household and Federal workers)	3.4	3.4	.8	1.2	.6	.4	1.0	1.1	.9	1.3	–
Private industry workers	3.5	3.4	.9	1.1	.6	.4	1.1	.9	.9	1.5	–
Goods-producing[3]	2.8	3.4	.8	.7	.5	.8	.7	.9	1.0	1.6	–
Service-producing[3]	3.8	3.4	.8	1.3	.6	.3	1.3	.9	.8	1.4	–
State and local government workers	3.0	3.4	.3	1.5	.6	.5	.4	1.5	1.0	.6	–
Workers by bargaining status (private industry):											
Union	3.0	2.7	1.0	1.1	.5	.4	.7	.9	.7	1.3	–
Nonunion	3.5	3.6	.8	1.1	.6	.5	1.2	.9	1.0	1.5	–

[1] Quarterly data seasonally adjusted.

[2] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter.

[3] Goods-producing industries include mining, construction, and manufacturing. Service-producing industries include all other private sector industries.

NOTE: Dash indicates data not available.

2. Annual and quarterly percent changes in compensation, prices, and productivity

Selected measures	1998	1999	1998				1999				2000
			I	II	III	IV	I	II	III	IV	I
Compensation data[1,2]											
Employment Cost Index—compensation (wages, salaries, benefits):											
Civilian nonfarm	3.4	3.4	0.8	0.8	1.2	0.6	0.4	1.0	1.1	0.9	1.3
Private nonfarm	3.5	3.4	.9	.9	1.1	.6	.4	1.1	.9	.9	1.5
Employment Cost Index—wages and salaries:											
Civilian nonfarm	3.7	3.5	.9	.7	1.3	.7	.5	1.0	1.1	.8	1.1
Private nonfarm	3.9	3.5	1.1	.9	1.3	.6	.5	1.2	.9	.9	1.2
Price data[1]											
Consumer Price Index (All Urban Consumers): All Items	1.6	2.7	.6	.5	.4	.2	.7	.7	1.0	.2	1.7
Producer Price Index:											
Finished goods	.0	2.9	−.8	.5	−.1	.4	.0	1.2	1.5	.1	1.6
Finished consumer goods	.0	3.8	−1.0	.8	.0	.2	.0	1.8	2.2	−.2	2.0
Capital equipment	.0	.3	.0	−.5	−.4	.9	−.1	−.4	−.4	1.2	.1
Intermediate materials, supplies, and components	−3.3	3.7	−1.4	.2	−.5	−1.6	−.2	1.9	1.9	.1	2.0
Crude materials	−16.7	15.3	−8.8	−1.8	−5.6	−2.5	−.1	9.4	10.2	−3.5	9.5
Productivity data[3]											
Output per hour of all persons:											
Business sector	2.9	3.2	4.8	.7	3.5	4.3	2.9	.8	4.7	6.6	1.8
Nonfarm business sector	2.8	3.0	4.7	1.0	3.2	4.1	2.7	.5	5.0	6.9	2.4
Nonfinancial corporations[4]	4.0	4.0	3.7	3.9	5.9	3.1	4.1	3.4	4.0	5.1	3.6

[1] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted, and the price data are not compounded.

[2] Excludes Federal and private household workers.

[3] Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

[4] Output per hour of all employees.

3. Alternative measures of wage and compensation changes

Components	Quarterly average						Four quarters ending—					
	1998	1999				2000	1998	1999				2000
	IV	I	II	III	IV	I	IV	I	II	III	IV	I
Average hourly compensation:[1]												
All persons, business sector	4.9	4.9	5.1	4.5	3.3	3.5	5.4	5.4	5.3	4.9	4.5	4.1
All persons, nonfarm business sector	4.6	4.2	4.7	4.6	3.8	4.1	5.4	5.2	4.9	4.5	4.3	4.3
Employment Cost Index—compensation:												
Civilian nonfarm[2]	.6	.4	1.0	1.1	.9	1.3	3.4	3.0	3.2	3.1	3.4	4.3
Private nonfarm	.6	.4	1.1	.9	.9	1.5	3.5	3.0	3.3	3.1	3.4	4.6
Union	.5	.4	.7	.9	.7	1.3	3.0	3.0	2.7	2.5	2.7	3.6
Nonunion	.6	.5	1.2	.9	1.0	1.5	3.5	3.0	3.4	3.2	3.6	4.7
State and local governments	.6	.5	.4	1.5	1.0	.6	3.0	2.9	3.0	2.9	3.4	3.6
Employment Cost Index—wages and salaries:												
Civilian nonfarm[2]	.7	.5	1.0	1.1	.8	1.1	3.7	3.3	3.6	3.3	3.5	4.0
Private nonfarm	.6	.5	1.2	.9	.9	1.2	3.9	3.3	3.6	3.2	3.5	4.2
Union	.5	.4	.8	.7	.6	.5	3.3	3.1	3.1	2.5	2.6	2.7
Nonunion	.7	.5	1.2	.9	.9	1.3	4.0	3.3	3.7	3.3	3.6	4.4
State and local governments	.7	.4	.4	1.9	.9	.6	3.1	2.9	3.1	3.3	3.6	3.8

[1] Seasonally adjusted. "Quarterly average" is percent change from a quarter ago, at an annual rate.

[2] Excludes Federal and household workers.

4. Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
TOTAL															
Civilian noninstitutional population[1]	205,220	207,753	207,632	207,828	208,038	208,265	208,483	208,666	208,832	208,782	208,907	209,053	209,216	209,371	209,543
Civilian labor force	137,673	139,368	139,332	139,336	139,372	139,475	139,697	139,834	140,108	140,910	141,165	140,867	141,230	140,489	140,762
Participation rate	67.1	67.1	67.1	67.0	67.0	67.0	67.0	67.0	67.1	67.5	67.6	67.4	67.5	67.1	67.2
Employed	131,463	133,488	133,398	133,399	133,530	133,650	133,940	134,098	134,420	135,221	135,362	135,159	135,706	134,715	135,179
Employment-population ratio[2]	64.1	64.3	64.2	64.2	64.2	64.2	64.2	64.3	64.4	64.8	64.8	64.7	64.9	64.3	64.5
Unemployed	6,210	5,880	5,934	5,937	5,842	5,825	5,757	5,736	5,688	5,689	5,804	5,708	5,524	5,774	5,583
Unemployment rate	4.5	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.1	4.0	4.1	4.1	3.9	4.1	4.0
Not in the labor force	67,547	68,385	68,300	68,492	68,666	68,790	68,786	68,832	68,724	67,872	67,742	68,187	67,986	68,882	68,781
Men, 20 years and over															
Civilian noninstitutional population[1]	90,790	91,555	91,487	91,561	91,692	91,793	91,896	91,986	92,052	92,057	92,092	92,145	92,303	92,408	92,546
Civilian labor force	69,715	70,194	70,116	70,167	70,240	70,328	70,339	70,388	70,529	70,917	71,120	70,822	70,761	70,603	70,714
Participation rate	76.8	76.7	76.6	76.6	76.6	76.6	76.5	76.5	76.6	77.0	77.2	76.9	76.7	76.4	76.4
Employed	67,135	67,761	67,645	67,703	67,768	67,943	67,898	68,037	68,197	68,585	68,691	68,480	68,481	68,230	68,430
Employment-population ratio[2]	73.9	74.0	73.9	73.9	73.9	74.0	73.9	74.0	74.1	74.5	74.6	74.3	74.2	73.8	73.9
Agriculture	2,350	2,244	2,246	2,256	2,237	2,189	2,206	2,262	2,227	2,303	2,309	2,232	2,213	2,217	2,269
Nonagricultural industries	64,785	65,517	65,399	65,447	65,531	65,754	65,692	65,775	65,970	66,282	66,382	66,249	66,269	66,013	66,161
Unemployed	2,580	2,433	2,471	2,464	2,472	2,385	2,441	2,351	2,332	2,332	2,429	2,342	2,280	2,373	2,284
Unemployment rate	3.7	3.5	3.5	3.5	3.5	3.4	3.5	3.3	3.3	3.3	3.4	3.3	3.2	3.4	3.2
Women, 20 years and over															
Civilian noninstitutional population[1]	98,786	100,158	100,131	100,203	100,285	100,385	100,458	100,573	100,666	100,579	100,666	100,713	100,809	100,929	101,007
Civilian labor force	59,702	60,840	60,988	60,852	60,904	60,860	60,955	61,052	61,154	61,576	61,575	61,671	61,920	61,614	61,596
Participation rate	60.4	60.7	60.9	60.7	60.7	60.6	60.7	60.7	60.7	61.2	61.2	61.2	61.4	61.0	61.0
Employed	57,278	58,555	58,647	58,477	58,648	58,630	58,800	58,838	58,958	59,280	59,398	59,422	59,757	59,248	59,278
Employment-population ratio[2]	58.0	58.5	58.6	58.4	58.5	58.4	58.5	58.5	58.6	58.9	59.0	59.0	59.3	58.7	58.7
Agriculture	768	803	851	798	780	778	800	768	791	826	871	894	899	864	834
Nonagricultural industries	56,510	57,752	57,796	57,679	57,868	57,852	58,000	58,070	58,167	58,454	58,526	58,528	58,858	58,383	58,444
Unemployed	2,424	2,285	2,341	2,375	2,256	2,230	2,155	2,214	2,196	2,297	2,178	2,249	2,163	2,367	2,318
Unemployment rate	4.1	3.8	3.8	3.9	3.7	3.7	3.5	3.6	3.6	3.7	3.5	3.6	3.5	3.8	3.8
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	15,644	16,040	16,014	16,065	16,061	16,086	16,129	16,107	16,114	16,147	16,149	16,196	16,104	16,034	15,991
Civilian labor force	8,256	8,333	8,228	8,317	8,228	8,287	8,403	8,394	8,425	8,416	8,470	8,374	8,549	8,271	8,452
Participation rate	52.8	52.0	51.4	51.8	51.2	51.5	52.1	52.1	52.3	52.1	52.4	51.7	53.1	51.6	52.9
Employed	7,051	7,172	7,106	7,219	7,114	7,077	7,242	7,223	7,265	7,356	7,273	7,257	7,467	7,237	7,471
Employment-population ratio[2]	45.1	44.7	44.4	44.9	44.3	44.0	44.9	44.8	45.1	45.6	45.0	44.8	46.4	45.1	46.7
Agriculture	261	234	233	224	217	212	232	280	261	242	228	233	243	217	218
Nonagricultural industries	6,790	6,938	6,873	6,995	6,897	6,865	7,010	6,943	7,004	7,114	7,046	7,024	7,224	7,020	7,253
Unemployed	1,205	1,162	1,122	1,098	1,114	1,210	1,161	1,171	1,160	1,060	1,197	1,117	1,082	1,034	981
Unemployment rate	14.6	13.9	13.6	13.2	13.5	14.6	13.8	14.0	13.8	12.6	14.1	13.3	12.7	12.5	11.6
White															
Civilian noninstitutional population[1]	171,478	173,085	172,999	173,133	173,275	173,432	173,585	173,709	173,821	173,812	173,886	173,983	174,092	174,197	174,316
Civilian labor force	115,415	116,509	116,518	116,492	116,619	116,495	116,654	116,703	117,008	117,716	117,821	117,832	117,988	117,097	117,451
Participation rate	67.3	67.3	67.4	67.3	67.3	67.2	67.2	67.2	67.3	67.7	67.8	67.7	67.8	67.2	67.4
Employed	110,931	112,235	112,115	112,193	112,308	112,303	112,548	112,611	112,951	113,704	113,634	113,630	113,915	112,988	113,484
Employment-population ratio[2]	64.7	64.8	64.8	64.8	64.8	64.8	64.8	64.8	65.0	65.4	65.3	65.3	65.4	64.9	65.1
Unemployed	4,484	4,273	4,403	4,299	4,311	4,192	4,106	4,092	4,057	4,011	4,187	4,202	4,073	4,108	3,967
Unemployment rate	3.9	3.7	3.8	3.7	3.7	3.6	3.5	3.5	3.5	3.4	3.6	3.6	3.5	3.5	3.4
Black															
Civilian noninstitutional population[1]	24,373	24,855	24,833	24,867	24,904	24,946	24,985	25,019	25,051	25,047	25,076	25,105	25,135	25,161	25,191
Civilian labor force	15,982	16,365	16,308	16,366	16,321	16,474	16,489	16,508	16,513	16,622	16,785	16,572	16,636	16,596	16,557
Participation rate	65.6	65.8	65.7	65.8	65.5	66.0	66.0	66.0	65.9	66.4	66.9	66.0	66.2	66.0	65.8
Employed	14,556	15,056	15,069	14,962	15,047	15,114	15,124	15,187	15,204	15,254	15,471	15,356	15,444	15,261	15,275
Employment-population ratio[2]	59.7	60.6	60.7	60.2	60.4	60.6	60.5	60.7	60.7	60.9	61.7	61.2	61.4	60.7	60.6
Unemployed	1,426	1,309	1,239	1,404	1,274	1,360	1,365	1,321	1,309	1,368	1,314	1,216	1,191	1,335	1,302
Unemployment rate	8.9	8.0	7.6	8.6	7.8	8.3	8.3	8.0	7.9	8.2	7.8	7.3	7.2	8.0	7.9

See footnotes at end of table.

4. Continued—Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Hispanic origin															
Civilian noninstitutional population[1]	21,070	21,650	21,618	21,684	21,752	21,820	21,881	21,947	22,008	22,047	22,108	22,166	22,231	22,292	22,355
Civilian labor force	14,317	14,665	14,624	14,677	14,710	14,766	14,809	14,887	14,984	15,251	15,249	15,313	15,355	15,322	15,325
Participation rate	67.9	67.7	67.6	67.7	67.6	67.7	67.7	67.8	68.1	69.2	69.0	69.1	69.1	68.7	68.6
Employed	13,291	13,720	13,655	13,696	13,759	13,795	13,879	13,979	14,095	14,395	14,382	14,355	14,524	14,432	14,461
Employment-population ratio[2]	63.1	63.4	63.2	63.2	63.3	63.2	63.4	63.7	64.0	65.3	65.1	64.8	65.3	64.7	64.7
Unemployed	1,026	945	969	921	951	971	930	908	889	856	868	958	831	890	864
Unemployment rate	7.2	6.4	6.6	6.3	6.5	6.6	6.3	6.1	5.9	5.6	5.7	6.3	5.4	5.8	5.6

[1] The population figures are not seasonally adjusted.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" groups are not presented and Hispanics are included in both the white and black population groups.

5. Selected employment indicators, monthly data seasonally adjusted

[In thousands]

Selected categories	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Characteristic															
Employed, 16 years and over	131,463	133,488	133,398	133,399	133,530	133,650	133,940	134,098	134,420	135,221	135,362	135,159	135,706	134,715	135,179
Men	70,693	71,446	71,330	71,437	71,436	71,630	71,623	71,732	71,927	72,358	72,473	72,313	72,307	71,948	72,217
Women	60,771	62,042	62,068	61,962	62,094	62,020	62,317	62,366	62,493	62,863	62,889	62,846	63,399	62,767	62,962
Married men, spouse present	42,923	43,254	43,279	43,350	43,368	43,367	43,206	43,273	43,283	43,951	43,535	43,297	43,272	43,216	43,357
Married women, spouse present	32,872	33,450	33,758	33,387	33,504	33,275	33,521	33,635	33,762	34,166	33,882	33,780	33,877	33,786	33,824
Women who maintain families	7,904	8,229	8,028	8,272	8,335	8,312	8,398	8,526	8,375	8,362	8,220	8,082	8,307	8,301	8,280
Class of worker															
Agriculture:															
Wage and salary workers	2,000	1,944	1,923	1,939	1,908	1,930	1,936	2,049	2,018	2,024	2,025	2,043	2,054	2,006	2,059
Self-employed workers	1,341	1,297	1,341	1,292	1,266	1,198	1,267	1,216	1,211	1,320	1,344	1,292	1,272	1,252	1,175
Unpaid family workers	38	40	39	45	46	40	42	41	36	38	51	42	43	38	50
Nonagricultural industries:															
Wage and salary workers	119,019	121,323	121,006	121,188	121,150	121,583	121,654	121,965	122,426	122,823	123,166	123,169	123,623	122,860	123,002
Government	18,383	18,903	19,007	19,032	19,114	19,080	18,817	18,902	18,959	19,013	19,394	19,598	19,280	19,169	18,777
Private industries	100,637	102,420	101,999	102,156	102,036	102,503	102,837	103,063	103,467	103,810	103,772	103,571	104,343	103,691	104,225
Private households	962	933	983	944	873	1,035	939	944	948	952	1,016	998	1,019	953	957
Other	99,674	101,487	101,016	101,212	101,163	101,468	101,898	102,119	102,519	102,858	102,756	102,573	103,324	102,783	103,268
Self-employed workers	8,962	8,790	8,840	8,820	9,000	8,791	8,833	8,686	8,662	8,802	8,793	8,704	8,750	8,714	8,665
Unpaid family workers	103	95	88	77	93	100	101	108	98	92	74	107	103	82	71
Persons at work part time[1]															
All industries:															
Part time for economic reasons	3,665	3,357	3,377	3,316	3,279	3,283	3,179	3,274	3,320	3,219	3,139	3,124	3,124	3,248	3,117
Slack work or business conditions	2,095	1,968	2,048	1,974	1,904	1,922	1,928	1,930	1,951	1,893	1,807	1,820	1,844	1,962	1,811
Could only find part-time work	1,258	1,079	1,045	1,050	1,057	1,073	993	1,032	1,025	1,012	1,023	953	1,016	978	1,022
Part time for noneconomic reasons	18,530	18,758	18,716	18,983	19,230	18,801	18,799	18,651	18,618	18,889	19,031	18,770	18,474	18,409	18,308
Nonagricultural industries:															
Part time for economic reasons	3,501	3,189	3,209	3,142	3,127	3,112	2,983	3,105	3,157	3,066	2,985	3,003	3,021	3,096	2,967
Slack work or business conditions	1,997	1,861	1,902	1,850	1,813	1,806	1,807	1,815	1,843	1,801	1,705	1,766	1,782	1,840	1,713
Could only find part-time work	1,228	1,056	1,031	1,034	1,041	1,063	964	1,013	1,018	966	1,005	922	989	962	994
Part time for noneconomic reasons	17,954	18,197	18,106	18,466	18,652	18,273	18,249	18,083	18,061	18,347	18,406	18,184	17,943	17,853	17,743

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Characteristic															
Total, 16 years and over	4.5	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.1	4.0	4.1	4.1	3.9	4.1	4.0
Both sexes, 16 to 19 years	14.6	13.9	13.6	13.2	13.5	14.6	13.8	14.0	13.8	12.6	14.1	13.3	12.7	12.5	11.6
Men, 20 years and over	3.7	3.5	3.5	3.5	3.5	3.4	3.5	3.3	3.3	3.3	3.4	3.3	3.2	3.4	3.2
Women, 20 years and over	4.1	3.8	3.8	3.9	3.7	3.7	3.5	3.6	3.6	3.7	3.5	3.6	3.5	3.8	3.8
White, total	3.9	3.7	3.8	3.7	3.7	3.6	3.5	3.5	3.5	3.4	3.6	3.6	3.5	3.5	3.4
Both sexes, 16 to 19 years	12.6	12.0	12.0	11.4	11.7	12.3	11.8	12.0	12.2	10.8	12.5	11.7	11.6	10.6	9.4
Men, 16 to 19 years	14.1	12.6	12.0	11.7	12.3	12.7	11.9	12.8	13.3	12.4	14.4	11.3	13.0	10.7	11.2
Women, 16 to 19 years	10.9	11.3	12.0	11.1	11.0	11.9	11.7	11.2	10.9	9.1	10.4	12.1	10.0	10.5	7.4
Men, 20 years and over	3.2	3.0	3.2	3.1	3.2	2.9	2.9	2.8	2.8	2.8	2.9	2.9	2.8	2.8	2.8
Women, 20 years and over	3.4	3.3	3.4	3.3	3.2	3.2	3.1	3.1	3.0	3.1	3.1	3.2	3.1	3.3	3.2
Black, total	8.9	8.0	7.6	8.6	7.8	8.3	8.3	8.0	7.9	8.2	7.8	7.3	7.2	8.0	7.9
Both sexes, 16 to 19 years	27.6	27.9	24.8	26.9	28.1	30.8	30.8	28.4	25.3	23.9	24.3	25.1	22.2	23.9	25.4
Men, 16 to 19 years	30.1	30.9	28.8	30.7	29.6	30.3	35.3	31.0	27.5	24.0	22.3	21.3	22.0	27.7	32.0
Women, 16 to 19 years	25.3	25.1	21.2	23.4	26.7	31.4	26.1	25.9	23.0	23.8	26.6	28.9	22.4	20.2	18.2
Men, 20 years and over	7.4	6.7	6.4	7.2	6.3	7.1	7.7	7.0	7.0	7.4	7.1	6.4	6.6	7.2	6.9
Women, 20 years and over	7.9	6.8	6.7	7.7	6.9	6.7	6.1	6.6	6.7	7.2	6.5	6.1	5.8	7.0	6.6
Hispanic origin, total	7.2	6.4	6.6	6.3	6.5	6.6	6.3	6.1	5.9	5.6	5.7	6.3	5.4	5.8	5.6
Married men, spouse present	2.4	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.2	2.0	2.1	2.0	1.8	1.9	1.9
Married women, spouse present	2.9	2.7	2.7	2.8	2.7	2.6	2.5	2.5	2.5	2.6	2.6	2.7	2.6	2.9	2.6
Women who maintain families	7.2	6.4	6.5	6.4	6.3	6.4	6.0	6.0	6.2	6.2	6.1	6.8	6.3	6.5	6.1
Full-time workers	4.3	4.1	4.0	4.1	4.1	4.0	4.0	3.9	3.9	3.9	3.9	3.8	3.8	3.9	3.8
Part-time workers	5.3	5.0	5.3	4.9	4.6	5.0	4.7	4.9	4.9	4.6	4.9	5.1	4.6	5.3	4.8
Industry															
Nonagricultural wage and salary workers	4.6	4.3	4.4	4.4	4.2	4.3	4.2	4.2	4.1	4.2	4.2	4.3	4.0	4.2	4.0
Mining	3.2	5.7	4.8	6.0	4.2	6.7	5.0	4.6	4.1	2.6	4.0	2.5	2.8	4.2	3.5
Construction	7.5	7.0	7.3	6.9	7.6	6.9	6.7	5.7	6.6	6.4	7.5	6.9	5.2	5.8	5.9
Manufacturing	3.9	3.6	3.7	3.5	3.8	3.9	3.7	3.7	3.6	3.2	3.3	3.9	4.0	3.7	3.4
Durable goods	3.4	3.5	3.5	3.7	3.7	4.0	3.5	3.7	3.6	2.8	3.0	3.0	3.9	3.6	3.5
Nondurable goods	4.7	3.9	4.0	3.1	4.1	3.9	4.0	3.7	3.5	3.9	3.8	5.2	4.1	3.7	3.1
Transportation and public utilities	3.4	3.0	2.9	3.4	3.0	2.8	3.1	3.3	3.0	3.7	3.2	3.1	2.9	3.2	2.7
Wholesale and retail trade	5.5	5.2	5.3	5.2	4.8	5.2	4.9	5.3	5.2	5.1	5.3	5.4	4.9	5.1	5.2
Finance, insurance, and real estate	2.5	2.3	2.4	2.4	2.4	2.3	2.3	2.3	2.1	2.5	2.9	2.4	2.6	2.4	2.3
Services	4.5	4.1	4.2	4.4	4.0	4.1	4.0	3.9	3.8	4.2	3.7	4.0	3.7	4.1	3.8
Government workers	2.3	2.2	2.3	2.2	2.1	2.0	2.1	2.0	2.1	2.1	2.2	1.7	1.7	2.0	2.5
Agricultural wage and salary workers	8.3	8.9	9.3	9.0	9.6	5.7	7.7	8.3	7.1	5.0	6.5	5.6	8.4	7.6	7.3
Educational attainment[1]															
Less than a high school diploma	7.1	6.7	6.8	6.8	7.0	6.8	6.6	6.5	6.0	6.6	6.0	6.9	6.1	7.0	6.4
High school graduates, no college	4.0	3.5	3.8	3.6	3.5	3.5	3.3	3.3	3.5	3.5	3.5	3.4	3.4	3.6	3.4
Some college, less than a bachelor's degree	3.0	2.8	2.6	3.0	3.1	2.7	2.7	2.7	2.5	2.6	2.9	2.7	2.6	2.5	2.9
College graduates	1.8	1.8	2.0	1.8	1.6	1.7	1.7	1.7	1.8	1.8	1.6	1.6	1.5	1.6	1.5

[1] Data refer to persons 25 years and over.

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov,	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Less than 5 weeks	2,622	2,568	2,540	2,640	2,599	2,582	2,545	2,601	2,620	2,447	2,603	2,824	2,455	2,531	2,595
5 to 14 weeks	1,950	1,832	1,775	1,778	1,798	1,805	1,811	1,760	1,694	1,754	1,864	1,719	1,868	1,953	1,759
15 weeks and over	1,637	1,480	1,634	1,511	1,463	1,412	1,434	1,401	1,388	1,372	1,277	1,295	1,250	1,337	1,242
15 to 26 weeks	763	755	806	779	747	708	719	725	693	667	673	657	670	677	593
27 weeks and over	875	725	828	732	716	704	715	676	695	705	604	637	580	660	649
Mean duration, in weeks	14.5	13.4	14.3	13.5	13.2	13.0	13.2	13.0	12.9	13.2	12.5	12.8	12.4	12.6	12.4
Median duration, in weeks	6.7	6.4	6.3	5.8	6.4	5.9	6.3	6.2	5.9	5.7	6.1	6.0	6.0	5.8	5.8

8. Unemployed persons by reason for unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Reason for unemployment	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Job losers[1]	2,822	2,622	2,670	2,670	2,629	2,573	2,518	2,493	2,401	2,477	2,616	2,541	2,306	2,483	2,450
On temporary layoff	866	848	876	847	893	869	802	851	795	739	838	781	703	894	959
Not on temporary layoff	1,957	1,774	1,794	1,823	1,736	1,704	1,716	1,642	1,606	1,739	1,778	1,759	1,602	1,589	1,491
Job leavers	734	783	831	768	793	758	778	821	825	776	759	824	883	774	671
Reentrants	2,132	2,005	2,038	2,003	1,942	1,967	1,958	1,935	2,036	2,043	1,975	1,979	1,961	2,093	2,076
New entrants	520	469	359	459	481	504	511	485	453	393	387	434	408	500	343
Percent of unemployed															
Job losers[1]	45.5	44.6	45.3	45.3	45.0	44.3	43.7	43.5	42.0	43.5	45.6	44.0	41.9	42.4	44.2
On temporary layoff	13.9	14.4	14.9	14.4	15.3	15.0	13.9	14.8	13.9	13.0	14.6	13.5	12.8	15.3	17.3
Not on temporary layoff	31.5	30.2	30.4	30.9	29.7	29.4	29.8	28.6	28.1	30.6	31.0	30.5	29.1	27.2	26.9
Job leavers	11.8	13.3	14.1	13.0	13.6	13.1	13.5	14.3	14.4	13.6	13.2	14.3	15.1	13.2	12.1
Reentrants	34.3	34.1	34.6	33.9	33.2	33.9	34.0	33.7	35.6	35.9	34.4	34.3	35.6	35.8	37.5
New entrants	8.4	8.0	6.1	7.8	8.2	8.7	8.9	8.5	7.9	6.9	6.7	7.5	7.4	8.5	6.2
Percent of civilian labor force															
Job losers[1]	2.1	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.8	1.9	1.8	1.6	1.8	1.7
Job leavers	.5	.6	.6	.6	.6	.5	.6	.6	.6	.6	.5	.6	.6	.6	.5
Reentrants	1.5	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.5	1.5
New entrants	.4	.3	.3	.3	.3	.4	.4	.3	.3	.3	.3	.3	.3	.4	.2

[1] Includes persons who completed temporary jobs.

9. Unemployment rates by sex and age, monthly data seasonally adjusted

[Civilian workers]

Sex and age	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Total, 16 years and over	4.5	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.1	4.0	4.1	4.1	3.9	4.1	4.0
16 to 24 years	10.4	9.9	9.8	9.7	9.6	10.0	10.0	10.0	9.8	9.3	10.0	9.7	9.3	9.8	9.0
16 to 19 years	14.6	13.9	13.6	13.2	13.5	14.6	13.9	14.0	13.8	12.6	14.1	13.3	12.7	12.5	11.6
16 to 17 years	17.2	16.3	16.3	15.4	15.9	16.1	15.9	16.5	16.5	14.0	15.9	15.3	14.6	16.0	13.1
18 to 19 years	12.8	12.4	11.8	11.7	12.1	13.8	12.4	12.3	12.1	11.4	12.8	12.1	11.4	10.4	10.6
20 to 24 years	7.9	7.5	7.6	7.6	7.3	7.2	7.7	7.7	7.4	7.4	7.5	7.6	7.2	8.2	7.5
25 years and over	3.4	3.1	3.2	3.2	3.2	3.1	3.0	3.0	3.0	3.0	3.0	3.0	2.9	3.0	3.0
25 to 54 years	3.5	3.2	3.3	3.3	3.2	3.2	3.1	3.1	3.0	3.1	3.0	3.0	3.0	3.1	3.1
55 years and over	2.7	2.8	3.0	2.9	2.7	2.6	2.7	2.6	2.7	2.8	3.0	2.7	2.4	2.4	2.3
Men, 16 years and over	4.4	4.1	4.1	4.1	4.1	4.0	4.1	4.0	4.0	3.9	4.1	3.8	3.8	3.9	3.9
16 to 24 years	11.1	10.3	10.5	10.2	9.9	9.9	10.4	10.2	10.6	9.7	10.3	9.2	9.6	10.0	9.5
16 to 19 years	16.2	14.7	14.3	13.8	13.9	14.6	14.2	14.9	15.2	14.0	15.5	12.4	13.6	13.1	14.1
16 to 17 years	19.1	17.0	16.8	16.1	16.2	16.6	15.5	16.9	17.7	14.3	17.3	15.1	15.8	16.9	15.6
18 to 19 years	14.1	13.1	12.7	12.2	12.6	13.2	13.2	13.6	13.5	13.7	13.9	10.5	12.4	10.8	13.3
20 to 24 years	8.1	7.7	8.3	8.1	7.6	7.2	8.2	7.5	7.8	7.2	7.3	7.4	7.3	8.3	6.8
25 years and over	3.2	3.0	3.0	3.0	3.1	3.0	2.9	2.8	2.8	2.8	2.9	2.8	2.7	2.8	2.8
25 to 54 years	3.3	3.0	3.0	3.0	3.1	3.0	3.0	2.9	2.9	2.9	2.9	2.8	2.7	2.8	2.9
55 years and over	2.8	2.8	2.7	3.0	2.9	2.9	2.8	2.6	2.5	2.5	2.8	2.8	2.7	2.6	2.2
Women, 16 years and over	4.6	4.3	4.4	4.4	4.3	4.3	4.2	4.2	4.1	4.2	4.1	4.3	4.0	4.3	4.1
16 to 24 years	9.8	9.5	9.1	9.1	9.3	10.0	9.6	9.8	8.9	8.9	9.6	10.2	8.9	9.5	8.5
16 to 19 years	12.9	13.2	13.0	12.6	13.2	14.7	13.4	13.0	12.2	11.1	12.6	14.4	11.6	11.8	8.9
16 to 17 years	15.1	15.5	15.7	14.7	15.6	15.6	16.3	16.1	15.1	13.7	14.3	15.4	13.3	15.0	10.4
18 to 19 years	11.5	11.6	10.9	11.2	11.6	14.5	11.4	10.8	10.5	8.9	11.6	13.7	10.4	9.9	7.8
20 to 24 years	7.8	7.2	6.8	7.1	7.0	7.2	7.2	7.9	7.0	7.6	7.8	7.7	7.2	8.2	8.2
25 years and over	3.6	3.3	3.5	3.5	3.3	3.2	3.1	3.1	3.2	3.2	3.0	3.2	3.0	3.3	3.2
25 to 54 years	3.8	3.4	3.5	3.6	3.4	3.4	3.2	3.3	3.2	3.3	3.0	3.3	3.2	3.5	3.4
55 years and over	2.6	2.8	3.3	2.9	2.4	2.1	2.5	2.6	2.9	3.1	3.3	2.7	2.0	2.3	2.4

10. Unemployment rates by State, seasonally adjusted

State	May 1999	Apr. 2000	May 2000[P]	State	May 1999	Apr. 2000	May 2000[P]
Alabama	4.9	4.1	4.3	Missouri	3.7	2.5	2.8
Alaska	6.8	6.6	6.1	Montana	5.3	4.9	4.9
Arizona	4.6	3.7	3.8	Nebraska	3.0	2.9	2.8
Arkansas	4.5	4.4	4.5	Nevada	4.6	3.8	3.4
California	5.3	4.8	5.0	New Hampshire	2.8	2.5	2.7
Colorado	2.9	2.8	2.2	New Jersey	4.8	3.8	3.8
Connecticut	3.4	2.3	2.4	New Mexico	5.6	5.4	5.5
Delaware	3.6	3.6	3.6	New York	5.2	4.6	4.6
District of Columbia	6.3	5.5	5.4	North Carolina	3.1	3.0	3.3
Florida	3.9	3.8	3.8	North Dakota	3.5	2.8	2.4
Georgia	4.1	3.6	3.6	Ohio	4.3	3.9	4.0
Hawaii	5.7	4.3	4.3	Oklahoma	3.5	2.9	2.8
Idaho	5.5	4.4	4.3	Oregon	5.8	4.6	5.0
Illinois	4.4	4.3	4.3	Pennsylvania	4.4	3.8	4.0
Indiana	3.1	3.5	3.2	Rhode Island	4.2	3.7	4.0
Iowa	2.6	2.2	2.3	South Carolina	4.6	3.5	4.0
Kansas	2.9	3.3	3.4	South Dakota	3.0	2.3	2.6
Kentucky	4.7	3.9	4.0	Tennessee	4.1	3.7	3.6
Louisiana	5.0	4.4	4.9	Texas	4.7	4.5	4.4
Maine	4.5	3.3	3.5	Utah	4.0	2.7	2.9
Maryland	3.7	3.2	3.4	Vermont	3.0	2.4	2.5
Massachusetts	3.2	2.8	2.5	Virginia	2.8	2.7	2.5
Michigan	3.8	3.0	3.2	Washington	5.0	4.6	4.7
Minnesota	2.9	2.6	3.0	West Virginia	6.8	5.1	5.6
Mississippi	5.2	5.5	5.8	Wisconsin	3.1	3.4	3.3
				Wyoming	5.1	4.0	3.8

[P] = preliminary

11. Employment of workers on nonfarm payrolls by State, seasonally adjusted

[In thousands]

State	May 1999	Apr. 2000	May 2000[P]	State	May 1999	Apr. 2000	May 2000[P]
Alabama	1,914.2	1,949.2	1,958.9	Missouri	2,716.5	2,749.0	2,748.4
Alaska	276.3	282.9	282.4	Montana	379.6	389.8	390.6
Arizona	2,148.2	2,246.0	2,256.7	Nebraska	888.3	895.1	894.2
Arkansas	1,137.0	1,167.3	1,169.3	Nevada	979.0	1,015.2	1,022.9
California	13,924.8	14,330.7	14,390.1	New Hampshire	603.6	613.2	612.4
Colorado	2,123.8	2,196.5	2,201.0	New Jersey	3,860.0	3,923.3	3,933.3
Connecticut	1,668.8	1,692.0	1,694.6	New Mexico	728.3	742.4	743.4
Delaware	410.1	422.8	423.4	New York	8,427.7	8,599.6	8,633.4
District of Columbia	613.6	620.0	618.5	North Carolina	3,852.1	3,921.4	3,932.5
Florida	6,832.5	7,112.9	7,153.0	North Dakota	322.9	325.3	324.2
Georgia	3,870.2	4,006.0	4,007.5	Ohio	5,536.2	5,601.6	5,596.5
Hawaii	531.6	541.5	543.6	Oklahoma	1,456.4	1,486.1	1,490.2
Idaho	535.8	556.2	558.7	Oregon	1,565.9	1,591.5	1,595.1
Illinois	5,953.7	6,012.9	6,007.9	Pennsylvania	5,571.7	5,621.2	5,610.8
Indiana	2,968.0	2,993.6	3,007.7	Rhode Island	463.2	470.6	471.9
Iowa	1,467.5	1,488.4	1,491.6	South Carolina	1,827.5	1,868.0	1,877.8
Kansas	1,320.8	1,344.5	1,345.6	South Dakota	372.2	379.9	378.0
Kentucky	1,791.9	1,836.5	1,838.7	Tennessee	2,666.2	2,709.6	2,717.6
Louisiana	1,888.7	1,911.5	1,917.1	Texas	9,119.8	9,358.1	9,407.9
Maine	582.7	601.3	601.3	Utah	1,046.0	1,069.0	1,070.2
Maryland	2,378.5	2,441.3	2,444.8	Vermont	290.5	295.4	296.9
Massachusetts	3,223.8	3,291.7	3,291.7	Virginia	3,396.1	3,471.1	3,467.9
Michigan	4,526.6	4,572.1	4,583.4	Washington	2,633.1	2,679.8	2,696.9
Minnesota	2,600.2	2,654.8	2,656.3	West Virginia	725.8	732.2	745.0
Mississippi	1,153.1	1,156.5	1,157.2	Wisconsin	2,773.9	2,820.8	2,813.1
				Wyoming	231.2	235.6	235.1

[P] = preliminary

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the data base.

12. Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]	June[p]
TOTAL	125,865	128,786	128,630	128,898	129,057	129,265	129,523	129,788	130,038	130,387	130,482	131,009	131,419	131,590	131,601
PRIVATE SECTOR	106,042	108,616	108,507	108,735	108,846	109,042	109,275	109,517	109,730	110,036	110,088	110,462	110,752	110,587	110,793
GOODS-PRODUCING	25,414	25,482	25,432	25,488	25,430	25,460	25,483	25,527	25,561	25,677	25,624	25,738	25,725	25,687	25,700
Mining	590	535	529	528	526	527	529	527	530	530	533	536	539	537	539
Metal mining	49	45	45	45	44	45	45	45	45	45	45	45	45	44	45
Oil and gas extraction	339	293	287	286	286	287	289	288	291	293	296	300	303	304	305
Nonmetallic minerals, except fuels	110	112	112	112	112	112	112	112	111	111	111	111	111	110	110
Construction	6,020	6,404	6,388	6,408	6,401	6,439	6,470	6,516	6,552	6,652	6,618	6,726	6,694	6,670	6,673
General building contractors	1,377	1,450	1,447	1,451	1,447	1,458	1,464	1,470	1,474	1,498	1,491	1,508	1,497	1,496	1,494
Heavy construction, except building	840	869	866	867	865	866	872	876	882	892	885	905	899	891	884
Special trades contractors	3,804	4,084	4,075	4,090	4,089	4,115	4,134	4,170	4,196	4,262	4,242	4,313	4,298	4,283	4,295
Manufacturing	18,805	18,543	18,515	18,552	18,503	18,494	18,484	18,484	18,479	18,495	18,473	18,476	18,492	18,480	18,488
Production workers	12,952	12,739	12,711	12,753	12,706	12,700	12,702	12,702	12,701	12,713	12,697	12,683	12,689	12,683	12,681
Durable goods	11,205	11,103	11,083	11,125	11,097	11,090	11,083	11,085	11,087	11,099	11,088	11,094	11,104	11,107	11,121
Production workers	7,666	7,590	7,572	7,620	7,590	7,580	7,581	7,579	7,579	7,592	7,592	7,580	7,584	7,586	7,590
Lumber and wood products	814	828	827	829	829	830	831	831	831	830	832	830	830	828	826
Furniture and fixtures	533	548	547	554	551	551	553	553	552	553	553	555	557	558	558
Stone, clay, and glass products	562	563	562	563	563	563	562	564	565	568	567	568	567	567	570
Primary metal industries	715	700	698	701	699	697	697	698	698	699	699	701	699	699	700
Fabricated metal products	1,509	1,517	1,515	1,517	1,515	1,518	1,519	1,520	1,521	1,523	1,525	1,528	1,534	1,536	1,539
Industrial machinery and equipment	2,206	2,141	2,139	2,142	2,135	2,133	2,130	2,131	2,132	2,130	2,131	2,124	2,126	2,125	2,129
Computer and office equipment	382	370	373	371	370	370	369	370	370	369	368	366	364	360	360
Electronic and other electrical equipment	1,707	1,670	1,667	1,675	1,669	1,670	1,672	1,670	1,673	1,679	1,684	1,682	1,691	1,693	1,699
Electronic components and accessories	660	636	634	635	637	636	638	638	640	642	645	646	651	654	661
Transportation equipment	1,893	1,884	1,878	1,890	1,887	1,880	1,873	1,870	1,867	1,871	1,855	1,865	1,859	1,861	1,860
Motor vehicles and equipment	995	1,019	1,018	1,029	1,026	1,025	1,022	1,022	1,023	1,027	1,029	1,028	1,026	1,024	1,028
Aircraft and parts	525	495	496	493	488	483	478	473	470	469	453	467	461	463	459
Instruments and related products	873	856	856	859	854	852	849	850	849	847	844	844	844	845	847
Miscellaneous manufacturing industries	395	395	394	395	395	396	397	398	399	399	398	397	397	395	393
Nondurable goods	7,600	7,440	7,432	7,427	7,406	7,404	7,401	7,399	7,392	7,396	7,385	7,382	7,388	7,373	7,367
Production workers	5,287	5,149	5,139	5,133	5,116	5,120	5,121	5,123	5,122	5,121	5,105	5,103	5,105	5,097	5,091
Food and kindred products	1,683	1,677	1,674	1,674	1,667	1,673	1,673	1,675	1,674	1,681	1,672	1,671	1,678	1,676	1,681
Tobacco products	41	39	39	38	36	38	38	38	38	38	37	35	37	37	38
Textile mill products	598	560	560	557	556	552	550	552	549	548	549	549	548	545	543
Apparel and other textile products	766	692	693	688	681	678	674	672	669	666	665	665	665	660	651
Paper and allied products	677	668	668	668	667	666	665	665	665	664	663	662	662	661	660
Printing and publishing	1,565	1,553	1,551	1,552	1,552	1,551	1,551	1,549	1,548	1,549	1,550	1,551	1,554	1,552	1,558
Chemicals and allied products	1,043	1,034	1,033	1,032	1,030	1,031	1,032	1,031	1,030	1,031	1,031	1,031	1,030	1,027	1,025
Petroleum and coal products	139	134	133	134	132	133	133	132	132	132	132	132	132	132	131
Rubber and miscellaneous plastics products	1,005	1,006	1,003	1,008	1,008	1,005	1,008	1,009	1,011	1,011	1,010	1,010	1,007	1,008	1,006
Leather and leather products	84	78	78	76	77	77	77	76	76	76	76	76	75	75	74
SERVICE-PRODUCING	100,451	103,304	103,198	103,410	103,627	103,805	104,040	104,261	104,477	104,710	104,858	105,271	105,694	105,903	105,901
Transportation and public utilities	6,611	6,826	6,817	6,834	6,848	6,866	6,875	6,898	6,911	6,925	6,937	6,953	6,970	6,961	6,979
Transportation	4,273	4,409	4,408	4,420	4,426	4,436	4,441	4,453	4,459	4,470	4,479	4,492	4,509	4,498	4,507
Railroad transportation	231	230	232	229	227	226	226	226	226	225	225	222	221	219	217
Local and interurban passenger transit	469	485	485	486	488	488	489	490	491	493	494	494	498	498	496
Trucking and warehousing	1,744	1,805	1,803	1,808	1,810	1,816	1,818	1,823	1,818	1,827	1,828	1,833	1,839	1,832	1,834
Water transportation	181	187	187	188	188	189	190	190	192	192	196	197	200	200	201
Transportation by air	1,181	1,227	1,224	1,230	1,234	1,238	1,241	1,246	1,253	1,256	1,259	1,268	1,270	1,269	1,276
Pipelines, except natural gas	14	13	13	13	13	13	13	13	13	13	12	12	12	12	12
Transportation services	454	463	464	466	466	466	464	465	466	464	465	466	469	468	471
Communications and public utilities	2,338	2,416	2,409	2,414	2,422	2,430	2,434	2,445	2,452	2,455	2,458	2,461	2,461	2,463	2,472
Communications	1,477	1,552	1,544	1,551	1,558	1,565	1,572	1,581	1,588	1,591	1,598	1,602	1,604	1,607	1,615
Electric, gas, and sanitary services	861	865	865	863	864	865	862	864	864	864	860	859	857	856	857
Wholesale trade	6,800	6,924	6,905	6,927	6,946	6,962	6,973	6,989	7,002	7,005	7,011	7,033	7,055	7,047	7,031
Retail trade	22,295	22,788	22,810	22,833	22,841	22,844	22,863	22,893	22,936	22,973	22,987	23,027	23,197	23,081	23,130
Building materials and garden supplies	948	989	985	989	992	994	1,004	1,008	1,012	1,016	1,020	1,034	1,032	1,022	1,013
General merchandise stores	2,730	2,771	2,777	2,774	2,768	2,757	2,752	2,752	2,766	2,765	2,762	2,756	2,791	2,762	2,757
Department stores	2,415	2,431	2,439	2,433	2,426	2,414	2,408	2,406	2,416	2,419	2,417	2,409	2,443	2,406	2,401

See footnotes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.[p]	June[p]
Food stores	3,484	3,495	3,494	3,495	3,498	3,495	3,496	3,498	3,501	3,501	3,503	3,502	3,522	3,515	3,515
Automotive dealers and service stations	2,332	2,369	2,365	2,368	2,369	2,372	2,377	2,380	2,386	2,399	2,394	2,407	2,410	2,408	2,413
New and used car dealers	1,047	1,079	1,078	1,081	1,084	1,087	1,089	1,092	1,094	1,097	1,100	1,105	1,106	1,107	1,110
Apparel and accessory stores	1,141	1,174	1,172	1,184	1,181	1,183	1,186	1,190	1,182	1,176	1,184	1,188	1,195	1,194	1,198
Furniture and home furnishings stores	1,025	1,082	1,085	1,086	1,090	1,092	1,093	1,091	1,098	1,099	1,102	1,111	1,113	1,114	1,120
Eating and drinking places	7,768	7,940	7,965	7,958	7,958	7,956	7,950	7,966	7,986	7,998	7,992	8,000	8,097	8,031	8,066
Miscellaneous retail establishments	2,868	2,969	2,967	2,979	2,985	2,995	3,005	3,008	3,005	3,019	3,021	3,029	3,037	3,035	3,048
Finance, insurance, and real estate	7,389	7,569	7,573	7,583	7,590	7,589	7,599	7,604	7,613	7,612	7,624	7,621	7,610	7,599	7,593
Finance	3,588	3,691	3,693	3,700	3,704	3,702	3,704	3,707	3,710	3,709	3,717	3,713	3,709	3,702	3,707
Depository institutions	2,046	2,061	2,060	2,060	2,063	2,063	2,063	2,061	2,059	2,058	2,057	2,054	2,052	2,044	2,045
Commercial banks	1,472	1,476	1,476	1,475	1,476	1,476	1,475	1,473	1,471	1,470	1,469	1,466	1,464	1,457	1,457
Savings institutions	256	252	251	251	251	250	250	250	248	247	245	243	243	243	242
Nondepository institutions	658	710	718	718	716	711	706	704	704	699	699	692	686	683	679
Security and commodity brokers	647	688	684	691	695	697	703	709	713	716	723	728	732	736	743
Holding and other investment offices	238	231	231	231	230	231	232	233	234	236	238	239	239	239	240
Insurance	2,335	2,371	2,373	2,374	2,375	2,376	2,378	2,375	2,378	2,372	2,373	2,373	2,365	2,361	2,360
Insurance carriers	1,591	1,611	1,613	1,611	1,611	1,610	1,612	1,608	1,610	1,606	1,606	1,605	1,597	1,594	1,593
Insurance agents, brokers, and service	744	761	760	763	764	766	766	767	768	766	767	768	768	767	767
Real estate	1,465	1,507	1,507	1,509	1,511	1,511	1,517	1,522	1,525	1,531	1,534	1,535	1,536	1,536	1,526
Services[1]	37,533	39,027	38,970	39,070	39,191	39,321	39,482	39,606	39,707	39,844	39,914	40,090	40,195	40,212	40,360
Agricultural services	708	766	761	765	764	770	774	782	782	806	796	812	801	798	798
Hotels and other lodging places	1,789	1,848	1,845	1,851	1,857	1,863	1,863	1,868	1,868	1,866	1,868	1,885	1,902	1,905	1,920
Personal services	1,201	1,233	1,228	1,233	1,237	1,243	1,247	1,252	1,257	1,263	1,265	1,265	1,272	1,261	1,270
Business services	8,618	9,267	9,242	9,303	9,339	9,404	9,465	9,502	9,538	9,571	9,615	9,681	9,735	9,715	9,769
Services to buildings	950	985	982	988	992	994	997	998	997	997	1,000	1,004	1,001	998	1,002
Personnel supply services	3,278	3,601	3,585	3,618	3,626	3,678	3,712	3,734	3,748	3,753	3,773	3,817	3,885	3,855	3,878
Help supply services	2,956	3,228	3,216	3,244	3,251	3,298	3,327	3,343	3,358	3,361	3,382	3,418	3,485	3,440	3,450
Computer and data processing services	1,615	1,831	1,831	1,846	1,857	1,866	1,874	1,880	1,888	1,896	1,906	1,915	1,927	1,930	1,938
Auto repair services and parking	1,145	1,184	1,185	1,185	1,185	1,186	1,191	1,191	1,192	1,194	1,195	1,192	1,195	1,192	1,191
Miscellaneous repair services	376	377	375	375	376	377	379	379	382	382	384	384	383	382	384
Motion pictures	576	610	614	617	618	619	624	625	624	626	623	630	634	633	643
Amusement and recreation services	1,594	1,660	1,649	1,650	1,664	1,672	1,691	1,701	1,703	1,721	1,723	1,729	1,752	1,754	1,773
Health services	9,853	9,989	9,983	9,994	10,008	10,015	10,027	10,041	10,053	10,066	10,078	10,091	10,093	10,101	10,116
Offices and clinics of medical doctors	1,806	1,877	1,875	1,880	1,885	1,888	1,893	1,898	1,903	1,910	1,914	1,920	1,925	1,929	1,930
Nursing and personal care facilities	1,772	1,785	1,785	1,784	1,786	1,785	1,785	1,785	1,787	1,788	1,790	1,791	1,789	1,787	1,786
Hospitals	3,930	3,982	3,983	3,983	3,987	3,989	3,992	3,992	3,997	4,001	4,002	4,004	3,999	4,004	4,009
Home health care services	666	636	635	635	636	635	636	637	637	638	639	639	641	639	640
Legal services	971	997	997	996	999	1,000	1,003	1,005	1,007	1,008	1,007	1,007	1,004	1,005	1,009
Educational services	2,178	2,276	2,278	2,285	2,292	2,294	2,299	2,305	2,309	2,308	2,309	2,329	2,329	2,353	2,351
Social services	2,646	2,800	2,799	2,790	2,808	2,823	2,845	2,868	2,884	2,905	2,912	2,929	2,940	2,944	2,938
Child day care services	621	695	693	697	701	701	708	721	729	737	740	749	753	757	757
Residential care	744	775	772	776	780	785	790	795	800	803	807	810	812	815	819
Museums and botanical and zoological gardens	94	98	98	98	98	98	99	99	99	100	100	101	102	100	102
Membership organizations	2,372	2,425	2,427	2,419	2,426	2,430	2,431	2,434	2,438	2,439	2,439	2,440	2,439	2,438	2,441
Engineering and management services	3,139	3,254	3,246	3,265	3,276	3,283	3,300	3,310	3,327	3,344	3,354	3,369	3,368	3,385	3,410
Engineering and architectural services	908	953	951	956	957	956	964	969	974	982	984	985	987	994	1,007
Management and public relations	1,000	1,036	1,032	1,037	1,045	1,044	1,054	1,058	1,068	1,074	1,077	1,085	1,088	1,094	1,105
Government	19,823	20,170	20,123	20,163	20,211	20,223	20,248	20,271	20,308	20,351	20,394	20,547	20,667	21,003	20,808
Federal	2,686	2,669	2,662	2,656	2,655	2,655	2,647	2,646	2,646	2,663	2,700	2,816	2,885	3,235	3,038
Federal, except Postal Service	1,819	1,796	1,788	1,782	1,783	1,785	1,779	1,780	1,780	1,797	1,835	1,951	2,022	2,371	2,175
State	4,612	4,695	4,673	4,691	4,698	4,714	4,722	4,723	4,727	4,725	4,728	4,733	4,744	4,737	4,726
Education	1,922	1,968	1,950	1,967	1,972	1,978	1,979	1,980	1,983	1,981	1,981	1,982	1,990	1,984	1,972
Other State government	2,690	2,727	2,723	2,724	2,726	2,736	2,743	2,743	2,744	2,744	2,747	2,751	2,754	2,753	2,754
Local	12,525	12,806	12,788	12,816	12,858	12,854	12,879	12,902	12,935	12,963	12,966	12,998	13,038	13,031	13,044
Education	7,085	7,272	7,257	7,273	7,305	7,299	7,308	7,323	7,343	7,356	7,355	7,373	7,408	7,393	7,411
Other local government	5,440	5,534	5,531	5,543	5,553	5,555	5,571	5,579	5,592	5,607	5,611	5,625	5,630	5,638	5,633

[1] Includes other industries not shown separately.

[p] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

13. Average weekly hours of production or nonsupervisory workers on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]	June[p]
PRIVATE SECTOR	34.6	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.6	34.5	34.6	34.4	34.5
GOODS-PRODUCING	41.0	41.0	41.1	41.1	41.1	41.2	41.1	41.3	41.0	41.1	41.3	41.2	41.5	40.9	40.8
MINING	43.9	43.8	43.9	44.5	44.1	44.3	44.1	44.2	44.3	44.7	44.7	44.7	45.3	44.2	44.6
MANUFACTURING	41.7	41.7	41.8	41.8	41.8	41.8	41.8	41.7	41.7	41.7	41.8	41.7	42.2	41.4	41.6
Overtime hours	4.6	4.6	4.7	4.6	4.6	4.7	4.7	4.7	4.7	4.6	4.7	4.6	4.9	4.5	4.6
Durable goods	42.3	42.2	42.3	42.4	42.3	42.4	42.3	42.2	42.2	42.3	42.3	42.3	42.8	42.0	42.2
Overtime hours	4.8	4.8	4.8	4.8	4.8	4.9	4.8	4.8	4.8	4.8	4.9	4.8	5.1	4.7	4.8
Lumber and wood products	41.1	41.2	41.2	41.1	41.2	41.1	41.1	41.1	41.0	41.1	41.0	40.9	41.2	40.7	40.8
Furniture and fixtures	40.5	40.3	40.4	40.5	40.3	40.4	40.1	39.9	40.2	40.2	40.3	40.2	40.6	40.3	39.9
Stone, clay, and glass products	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.8	43.5	43.6	43.5	43.4	43.6	43.0	42.8
Primary metal industries	44.2	44.2	44.3	44.4	44.4	44.5	44.3	44.3	44.4	44.5	44.5	44.4	44.9	43.9	44.0
Blast furnaces and basic steel products	44.6	44.8	44.9	45.0	45.0	45.0	45.2	45.3	45.4	45.3	45.4	45.2	45.0	44.7	45.2
Fabricated metal products	42.3	42.2	42.2	42.3	42.3	42.3	42.2	42.1	42.1	42.4	42.4	42.5	43.0	42.2	42.3
Industrial machinery and equipment	42.8	42.2	42.1	42.3	42.3	42.4	42.3	42.2	42.2	42.3	42.3	42.3	42.9	42.1	42.4
Electronic and other electrical equipment	41.4	41.4	41.5	41.5	41.6	41.6	41.6	41.4	41.5	41.6	41.6	41.8	42.2	41.4	41.5
Transportation equipment	43.4	43.8	44.1	44.2	43.9	44.0	43.8	43.6	43.4	43.8	44.0	43.7	44.3	43.2	43.9
Motor vehicles and equipment	43.5	45.0	45.3	45.5	45.1	45.4	45.0	44.7	44.5	45.0	45.0	44.6	45.5	44.2	45.3
Instruments and related products	41.3	41.5	41.5	41.6	41.5	41.5	41.5	41.5	41.5	41.3	41.2	41.2	41.6	41.2	41.2
Miscellaneous manufacturing	39.9	39.8	39.9	39.9	40.0	39.9	39.8	39.7	39.7	39.5	39.5	39.4	39.8	39.3	39.5
Nondurable goods	40.9	40.9	41.0	41.0	41.0	41.0	41.0	41.0	40.9	40.9	41.0	40.9	41.3	40.6	40.6
Overtime hours	4.3	4.4	4.5	4.4	4.4	4.4	4.5	4.5	4.5	4.4	4.5	4.3	4.6	4.3	4.3
Food and kindred products	41.7	41.8	41.8	41.9	41.7	41.7	41.9	41.8	41.7	41.6	41.6	41.6	41.9	41.2	41.5
Textile mill products	41.0	40.9	40.7	41.1	41.0	40.9	41.2	41.3	41.2	41.1	41.7	41.6	41.9	41.0	41.0
Apparel and other textile products	37.3	37.5	37.6	37.5	37.4	37.4	37.5	37.4	37.5	37.6	37.7	37.8	38.0	37.0	37.1
Paper and allied products	43.4	43.5	43.6	43.5	43.6	43.4	43.5	43.4	43.3	43.3	43.5	43.2	43.6	42.8	42.6
Printing and publishing	38.3	38.2	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.2	38.5	38.0	38.1
Chemicals and allied products	43.2	43.0	43.0	43.1	43.2	43.2	43.0	43.0	43.0	42.9	42.7	42.6	42.9	42.7	42.6
Rubber and miscellaneous plastics products	41.7	41.7	41.8	41.7	41.7	41.8	41.5	41.5	41.5	41.6	41.6	41.5	42.1	41.3	41.3
Leather and leather products	37.6	37.8	37.9	37.9	37.9	37.5	37.6	37.7	37.4	37.8	38.1	38.0	38.9	38.2	37.7
SERVICE-PRODUCING	32.9	32.8	32.8	32.9	32.8	32.8	32.9	32.8	32.9	32.9	32.8	32.8	32.8	32.8	32.9
TRANSPORTATION AND PUBLIC UTILITIES	39.5	38.7	38.9	38.8	38.8	38.6	38.4	38.3	38.4	38.4	38.3	38.3	38.7	38.5	38.3
WHOLESALE TRADE	38.3	38.3	38.3	38.4	38.3	38.4	38.6	38.4	38.5	38.6	38.5	38.6	38.6	39.0	38.8
RETAIL TRADE	29.0	29.0	29.1	29.1	29.0	28.8	29.0	29.0	29.1	29.1	29.1	29.0	28.8	28.9	29.0

[p] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

14. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry, seasonally adjusted

Industry	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[P]	June[P]
PRIVATE SECTOR (in current dollars)	$ 12.78	$ 13.24	$13.23	$13.27	$13.30	$13.35	$13.38	$13.41	$13.44	$13.49	$13.54	$13.58	$13.64	$13.66	$13.71
Goods-producing	14.34	14.84	14.85	14.89	14.91	14.96	14.99	15.03	15.05	15.13	15.20	15.25	15.30	15.28	15.33
Mining	16.91	17.09	17.07	17.26	17.16	17.14	17.09	17.00	17.04	17.09	17.14	17.27	17.26	17.24	17.27
Construction	16.61	17.18	17.18	17.20	17.21	17.26	17.33	17.37	17.44	17.50	17.60	17.67	17.78	17.75	17.78
Manufacturing	13.49	13.91	13.93	13.98	14.01	14.04	14.06	14.07	14.10	14.15	14.21	14.23	14.28	14.26	14.34
Excluding overtime	12.79	13.18	13.19	13.24	13.27	13.29	13.31	13.33	13.36	13.41	13.45	13.47	13.49	13.52	13.59
Service-producing	12.27	12.73	12.71	12.76	12.78	12.83	12.86	12.89	12.93	12.97	13.01	13.05	13.11	13.15	13.20
Transportation and public utilities	15.31	15.69	15.67	15.72	15.73	15.79	15.79	15.84	15.94	15.92	16.00	16.04	16.12	16.20	16.29
Wholesale trade	14.07	14.58	14.56	14.61	14.65	14.70	14.75	14.76	14.83	14.90	14.89	14.90	15.03	15.04	15.11
Retail trade	8.74	9.08	9.07	9.10	9.13	9.16	9.18	9.21	9.25	9.26	9.32	9.35	9.39	9.39	9.43
Finance, insurance, and real estate	14.07	14.62	14.62	14.68	14.65	14.71	14.73	14.76	14.78	14.86	14.87	14.95	14.98	15.02	15.06
Services	12.84	13.36	13.35	13.39	13.42	13.46	13.51	13.53	13.57	13.61	13.66	13.69	13.74	13.79	13.84
PRIVATE SECTOR (in constant (1982) dollars)	7.75	7.86	7.88	7.88	7.87	7.86	7.87	7.87	7.87	7.88	7.87	7.84	7.87	7.88	7.86

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

15. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry

Industry	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[P]	June[P]
PRIVATE SECTOR	$12.78	$13.24	$13.15	$13.16	$13.20	$13.38	$13.41	$13.43	$13.46	$13.58	$13.58	$13.59	$13.69	$13.64	$13.62
MINING	16.91	17.09	16.98	17.17	17.05	17.13	17.05	17.01	17.19	17.30	17.20	17.28	17.29	17.18	17.12
CONSTRUCTION	16.61	17.18	17.13	17.27	17.31	17.46	17.54	17.42	17.47	17.39	17.42	17.54	17.66	17.71	17.75
MANUFACTURING	13.49	13.91	13.90	13.91	13.95	14.11	14.03	14.08	14.20	14.19	14.19	14.22	14.28	14.26	14.32
Durable goods	13.98	14.40	14.40	14.38	14.47	14.62	14.55	14.58	14.73	14.72	14.73	14.76	14.82	14.80	14.87
Lumber and wood products	11.10	11.47	11.46	11.53	11.54	11.56	11.60	11.60	11.64	11.67	11.63	11.62	11.73	11.74	11.83
Furniture and fixtures	10.90	11.23	11.16	11.25	11.28	11.33	11.33	11.36	11.47	11.47	11.51	11.59	11.64	11.69	11.70
Stone, clay, and glass products	13.59	13.87	13.91	13.97	13.94	14.10	14.00	14.04	13.97	13.94	13.96	14.03	14.23	14.26	14.32
Primary metal industries	15.48	15.83	15.90	16.02	15.98	16.18	16.01	16.12	16.17	16.20	16.28	16.34	16.51	16.39	16.54
Blast furnaces and basic steel products	18.42	18.81	18.99	19.06	18.93	18.99	18.90	19.11	19.09	19.16	19.32	19.49	19.72	19.44	19.61
Fabricated metal products	13.07	13.48	13.49	13.47	13.52	13.64	13.52	13.59	13.72	13.71	13.67	13.69	13.75	13.75	13.82
Industrial machinery and equipment	14.47	15.02	14.99	15.08	15.14	15.24	15.18	15.22	15.36	15.39	15.40	15.43	15.42	15.44	15.46
Electronic and other electrical equipment	13.10	13.46	13.42	13.49	13.52	13.64	13.60	13.61	13.73	13.77	13.72	13.70	13.70	13.66	13.68
Transportation equipment	17.51	18.04	18.14	17.88	18.17	18.50	18.41	18.39	18.72	18.57	18.58	18.70	18.82	18.79	18.96
Motor vehicles and equipment	17.84	18.41	18.61	18.16	18.53	18.96	18.85	18.80	19.22	18.99	19.03	19.17	19.36	19.34	19.53
Instruments and related products	13.81	14.17	14.13	14.25	14.28	14.29	14.36	14.34	14.41	14.38	14.41	14.40	14.40	14.44	14.43
Miscellaneous manufacturing	10.88	11.30	11.26	11.29	11.31	11.43	11.45	11.41	11.54	11.52	11.53	11.55	11.58	11.58	11.59
Nondurable goods	12.76	13.16	13.14	13.21	13.17	13.33	13.25	13.31	13.39	13.37	13.36	13.37	13.45	13.43	13.48
Food and kindred products	11.80	12.09	12.15	12.15	12.07	12.18	12.09	12.19	12.28	12.23	12.23	12.27	12.36	12.36	12.40
Tobacco products	18.56	19.07	20.69	21.09	20.86	18.90	17.82	18.02	18.03	17.21	17.48	19.10	19.71	20.19	20.81
Textile mill products	10.39	10.71	10.76	10.71	10.72	10.78	10.73	10.80	10.84	10.84	10.85	10.86	10.94	10.90	10.92
Apparel and other textile products	8.52	8.86	8.89	8.83	8.88	9.01	8.99	8.98	9.04	9.03	9.03	9.05	9.05	9.07	9.10
Paper and allied products	15.50	15.94	15.95	16.02	15.95	16.24	16.09	16.08	16.12	16.02	15.99	16.00	16.15	16.14	16.25
Printing and publishing	13.46	13.84	13.74	13.81	13.83	13.98	13.98	14.02	14.12	14.10	14.13	14.18	14.20	14.16	14.16
Chemicals and allied products	17.09	17.38	17.26	17.39	17.41	17.67	17.61	17.64	17.67	17.70	17.67	17.63	17.77	17.76	17.76
Petroleum and coal products	20.91	21.39	21.06	21.28	21.21	21.55	21.62	21.76	21.76	21.62	22.03	22.24	21.77	21.27	21.12
Rubber and miscellaneous plastics products	11.89	12.36	12.30	12.41	12.37	12.51	12.42	12.46	12.57	12.61	12.57	12.58	12.67	12.66	12.76
Leather and leather products	9.35	9.77	9.65	9.69	9.86	9.95	9.91	9.93	10.01	10.08	9.96	10.01	10.13	10.06	10.11
TRANSPORTATION AND PUBLIC UTILITIES	15.31	15.69	15.59	15.69	15.69	15.80	15.78	15.90	15.96	15.98	16.05	16.02	16.15	16.11	16.18
WHOLESALE TRADE	14.07	14.58	14.45	14.57	14.65	14.68	14.74	17.76	14.85	14.99	14.91	14.83	15.14	15.01	14.99
RETAIL TRADE	8.74	9.08	9.02	9.03	9.05	9.19	9.21	9.22	9.26	9.33	9.35	9.37	9.42	9.39	9.38
FINANCE, INSURANCE, AND REAL ESTATE	14.07	14.62	14.51	14.54	14.62	14.64	14.69	14.74	14.76	14.99	14.93	14.97	15.12	15.03	14.94
SERVICES	12.84	13.36	13.21	13.18	13.23	13.45	13.51	13.57	13.65	13.78	13.77	13.77	13.83	13.76	13.70

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

16. Average weekly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry

Industry	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]	June[p]
PRIVATE SECTOR															
Current dollars	$442.19	$456.78	$454.99	$456.65	$463.32	$458.93	$463.99	$463.34	$465.72	$467.15	$464.44	$464.78	$473.67	$467.85	$471.25
Seasonally adjusted	–	–	456.44	457.82	458.85	460.58	461.61	462.65	463.68	465.41	468.48	468.51	471.94	469.90	473.00
Constant (1982) dollars	268.32	271.25	270.83	271.01	274.15	269.96	272.45	271.91	273.31	273.51	270.50	268.35	273.32	269.65	270.06
MINING	742.35	748.54	750.52	767.50	758.73	758.86	758.73	758.65	763.24	766.39	758.52	758.59	776.32	764.51	770.40
CONSTRUCTION	646.13	671.74	681.77	689.07	692.40	673.96	701.60	688.09	677.84	664.04	674.15	680.55	692.27	701.32	702.90
MANUFACTURING															
Current dollars	562.53	580.05	581.02	573.09	583.11	588.39	589.26	594.18	603.50	590.30	588.89	590.13	595.48	590.36	595.71
Constant (1982) dollars	341.34	344.45	345.85	340.11	345.04	346.11	346.01	348.70	354.17	345.61	342.98	340.72	343.61	340.27	341.38
Durable goods	591.35	607.68	610.56	598.21	612.08	615.50	618.38	622.57	634.86	621.18	620.13	622.87	628.37	623.08	629.00
Lumber and wood products	456.21	472.56	476.74	475.04	482.37	472.80	480.24	480.24	480.73	474.97	469.85	470.61	482.10	480.17	486.21
Furniture and fixtures	441.45	452.57	449.75	452.25	459.10	456.60	458.87	458.94	471.42	459.95	458.10	462.44	464.44	465.26	466.83
Stone, clay, and glass products	591.17	603.35	612.04	611.89	614.75	620.40	616.00	620.57	604.90	591.06	591.90	596.28	614.74	620.31	621.49
Primary metal industries	684.22	699.69	707.55	698.47	704.72	716.77	709.24	720.56	732.50	722.52	722.83	723.86	734.70	722.80	731.07
Blast furnaces and basic steel products	821.53	842.69	858.35	850.08	849.96	852.65	848.61	865.68	878.14	867.95	875.20	875.10	891.34	872.86	886.37
Fabricated metal products	552.86	568.86	571.98	560.35	571.90	571.52	574.60	580.29	594.08	579.93	576.87	577.72	583.00	580.25	585.97
Industrial machinery and equipment	619.32	633.84	631.08	628.84	637.39	635.51	640.60	646.85	663.55	654.08	652.96	654.23	655.35	651.57	655.50
Electronic and other electrical equipment	542.34	557.24	556.93	550.39	562.43	563.33	568.48	572.98	582.15	572.83	569.38	571.29	569.92	562.79	569.09
Transportation equipment	759.93	790.15	798.16	754.54	794.03	812.15	810.04	811.00	838.66	811.51	815.66	819.06	829.96	817.37	832.34
Motor vehicles and equipment	776.04	828.45	843.03	777.25	828.29	860.78	852.02	849.76	887.96	850.75	856.35	860.73	880.88	866.43	884.71
Instruments and related products	570.35	588.06	586.40	584.25	591.19	587.32	594.50	600.85	612.43	595.33	595.13	593.28	594.72	592.04	593.07
Miscellaneous manufacturing	434.11	449.74	449.27	442.57	452.40	453.77	459.15	459.82	466.22	450.43	453.13	456.23	456.25	453.94	458.96
Nondurable goods	521.88	538.24	538.74	537.65	539.97	546.53	547.23	551.03	557.02	544.16	542.42	542.82	548.76	543.92	548.64
Food and kindred products	492.06	505.36	506.66	507.87	506.94	512.62	512.62	518.08	520.67	505.10	500.21	501.84	506.76	506.76	513.36
Tobacco products	710.85	762.80	829.67	849.93	836.49	754.11	753.79	774.86	793.32	672.91	685.22	741.08	782.49	803.56	826.16
Textile mill products	425.99	438.04	442.24	434.83	440.59	438.75	445.30	449.28	453.11	443.36	448.11	450.69	456.20	446.90	451.00
Apparel and other textile products	317.80	332.25	338.71	326.71	333.00	331.57	338.92	337.65	343.52	335.92	339.53	342.09	341.19	336.50	341.25
Paper and allied products	672.70	693.39	693.83	688.86	690.64	709.69	704.74	704.30	712.50	695.27	687.57	686.40	696.07	687.56	692.25
Printing and publishing	515.52	528.69	520.75	526.16	531.07	539.63	539.63	543.98	550.68	534.39	536.94	540.26	542.44	533.83	533.83
Chemicals and allied products	738.29	747.34	742.18	742.55	750.37	765.11	758.99	765.58	772.18	757.56	750.98	749.28	757.00	754.80	756.58
Petroleum and coal products	911.68	921.91	905.58	923.55	903.55	930.96	933.98	935.68	937.86	933.98	956.10	969.66	966.59	916.74	927.17
Rubber and miscellaneous plastics products	495.81	515.41	516.60	510.05	512.12	520.42	516.67	523.32	532.97	523.32	520.40	520.81	528.34	524.12	529.54
Leather and leather products	351.56	369.31	371.53	363.38	381.58	372.13	374.60	378.33	375.75	372.96	375.49	379.38	388.99	385.30	387.21
TRANSPORTATION AND PUBLIC UTILITIES	604.75	607.20	608.01	610.34	618.19	608.30	605.95	608.97	612.86	612.03	611.51	608.76	626.62	617.01	621.31
WHOLESALE TRADE	538.88	558.41	553.44	556.57	565.49	560.78	567.49	566.78	570.24	578.61	568.07	566.51	588.95	582.39	580.11
RETAIL TRADE	253.46	263.32	265.19	270.00	270.60	264.67	266.17	264.61	271.32	265.91	266.48	267.98	272.24	271.37	274.83
FINANCE, INSURANCE, AND REAL ESTATE	512.15	529.24	522.36	527.80	540.94	528.50	530.31	530.64	534.31	551.63	538.97	537.42	554.90	539.58	540.83
SERVICES	418.58	435.54	430.65	432.30	439.24	434.44	441.78	443.74	444.99	450.61	448.90	447.53	453.62	445.82	447.99

[p] = preliminary.
NOTE: See "Notes on the data" for a description of the most recent benchmark revision. Dash indicates data not available.

17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.
	Private nonfarm payrolls, 356 industries											
Over 1-month span:												
1997	57.3	59.7	62.8	63.2	57.7	57.7	61.2	60.1	61.5	65.3	62.1	61.2
1998	63.2	56.6	60.5	58.7	58.3	59.7	53.9	58.1	56.2	53.8	59.0	57.4
1999	54.1	58.8	53.9	59.6	52.8	57.9	58.8	53.8	57.3	60.7	60.8	59.0
2000	60.8	54.1	60.7	56.5	45.9	54.1	–	–	–	–	–	–
Over 3-month span:												
1997	62.6	64.0	66.3	66.7	63.2	62.1	61.5	66.2	67.4	69.4	69.0	69.1
1998	64.3	66.6	63.2	66.3	63.6	58.0	57.4	57.9	59.7	58.1	58.6	59.4
1999	58.3	57.3	58.4	54.4	57.3	58.8	58.1	60.7	59.6	63.5	64.3	63.1
2000	61.0	62.6	61.9	57.0	54.5	–	–	–	–	–	–	–
Over 6-month span:												
1997	66.3	67.0	66.6	66.3	65.6	67.1	66.3	68.5	69.0	70.4	69.7	70.4
1998	69.8	67.4	65.2	61.8	62.9	61.4	59.0	58.4	57.4	59.7	59.3	59.1
1999	60.0	58.0	57.6	58.6	54.4	59.7	60.4	62.1	64.0	62.8	65.2	64.6
2000	65.6	60.8	59.7	–	–	–	–	–	–	–	–	–
Over 12-month span:												
1997	69.0	67.3	68.3	69.7	69.5	70.1	70.1	70.4	70.5	70.1	69.4	70.4
1998	69.7	67.3	67.3	65.9	63.9	62.5	61.5	62.1	61.0	59.8	59.8	58.1
1999	60.3	58.3	57.6	59.4	59.6	60.5	61.9	61.0	62.6	62.9	62.6	62.6
	Manufacturing payrolls, 139 industries											
Over 1-month span.												
1997	49.6	52.5	56.1	54.0	51.4	54.3	50.7	53.6	56.5	61.9	60.4	55.4
1998	57.9	50.7	53.6	50.7	47.1	50.0	37.8	50.0	45.7	39.9	41.7	43.9
1999	45.0	41.0	42.8	46.4	40.3	46.4	54.7	38.1	46.4	51.8	51.4	50.4
2000	52.2	47.8	51.1	51.1	45.7	48.9	–	–	–	–	–	–
Over 3-month span:												
1997	50.7	53.2	55.8	56.1	53.2	52.5	52.5	55.8	59.7	66.5	64.7	64.0
1998	56.8	56.8	52.2	52.2	48.6	41.4	39.2	40.3	43.2	37.1	36.7	40.6
1999	36.7	37.1	37.1	34.5	37.8	43.5	39.9	45.0	42.1	50.4	51.1	50.7
2000	47.8	52.5	49.3	48.9	47.5	–	–	–	–	–	–	–
Over 6-month span:												
1997	53.2	53.2	52.5	52.9	51.8	53.2	54.7	61.2	61.2	64.4	64.7	63.7
1998	60.1	54.3	50.4	39.9	43.5	42.1	38.8	36.7	36.0	39.9	34.5	32.7
1999	35.6	33.5	33.5	37.1	32.7	38.8	41.0	45.7	48.2	43.2	48.6	51.1
2000	51.4	46.8	48.2	–	–	–	–	–	–	–	–	–
Over 12-month span:												
1997	54.7	52.5	54.0	54.0	55.4	56.8	57.2	57.9	58.3	56.8	56.8	57.2
1998	55.0	51.8	51.8	46.8	40.6	39.9	37.8	38.1	37.1	36.0	34.2	33.5
1999	37.4	32.4	31.7	35.3	36.0	37.1	38.8	39.6	42.4	42.4	43.5	46.0

– Data not available.

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment. Data for the 2 most recent months shown in each span are preliminary. See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

18. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	1991	1992	1993	1994	1995	1996	1997	1998	1999
Civilian noninstitutional population	190,925	192,805	194,838	196,814	198,584	200,591	203,133	205,220	207,753
Civilian labor force	126,346	128,105	129,200	131,056	132,304	133,943	136,297	137,673	139,368
Labor force participation rate	66.2	66.4	66.3	66.6	66.6	66.8	67.1	67.1	67.1
Employed	117,718	118,492	120,259	123,060	124,900	126,708	129,558	131,463	133,488
Employment-population ratio	61.7	61.5	61.7	62.5	62.9	63.2	63.8	64.1	64.3
Agriculture	3,269	3,247	3,115	3,409	3,440	3,443	3,399	3,378	3,281
Nonagricultural industries	114,499	115,245	117,144	119,651	121,460	123,264	126,159	128,085	130,207
Unemployed	8,628	9,613	8,940	7,996	7,404	7,236	6,739	6,210	5,880
Unemployment rate	6.8	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2
Not in the labor force	64,578	64,700	65,638	65,758	66,280	66,647	66,837	67,547	68,385

19. Annual data: Employment levels by industry

[In thousands]

Industry	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total employment	108,249	108,601	110,713	114,163	117,191	119,608	122,690	125,865	128,786
Private sector	89,847	89,956	91,872	95,036	97,885	100,189	103,133	106,042	108,616
Goods-producing	23,745	23,231	23,352	23,908	24,265	24,493	24,962	25,414	25,482
Mining	689	635	610	601	581	580	596	590	535
Construction	4,650	4,492	4,668	4,986	5,160	5,418	5,691	6,020	6,404
Manufacturing	18,406	18,104	18,075	18,321	18,524	18,495	18,675	18,805	18,543
Service-producing	84,504	85,370	87,361	90,256	92,925	95,115	97,727	100,451	103,304
Transportation and public utilities	5,755	5,718	5,811	5,984	6,132	6,253	6,408	6,611	6,826
Wholesale trade	6,081	5,997	5,981	6,162	6,378	6,482	6,648	6,800	6,924
Retail trade	19,284	19,356	19,773	20,507	21,187	21,597	21,966	22,295	22,788
Finance, insurance, and real estate	6,646	6,602	6,757	6,896	6,806	6,911	7,109	7,389	7,569
Services	28,336	29,052	30,197	31,579	33,117	34,454	36,040	37,533	39,027
Government	18,402	18,645	18,841	19,128	19,305	19,419	19,557	19,823	20,170
Federal	2,966	2,969	2,915	2,870	2,822	2,757	2,699	2,686	2,669
State	4,355	4,408	4,488	4,576	4,635	4,606	4,582	4,612	4,695
Local	11,081	11,267	11,438	11,682	11,849	12,056	12,276	12,525	12,806

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

20. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm payrolls, by industry

Industry	1991	1992	1993	1994	1995	1996	1997	1998	1999
Private sector:									
Average weekly hours	34.3	34.4	34.5	34.7	34.5	34.4	34.6	34.6	34.5
Average hourly earnings (in dollars)	10.32	10.57	10.83	11.12	11.43	11.82	12.28	12.78	13.24
Average weekly earnings (in dollars)	353.98	363.61	373.64	385.86	394.34	406.61	424.89	442.19	456.78
Mining:									
Average weekly hours	44.4	43.9	44.3	44.8	44.7	45.3	45.4	43.9	43.8
Average hourly earnings (in dollars)	14.19	14.54	14.60	14.88	15.30	15.62	16.15	16.91	17.09
Average weekly earnings (in dollars)	630.04	638.31	646.78	666.62	683.91	707.59	733.21	742.35	748.54
Construction:									
Average weekly hours	38.1	38.0	38.5	38.9	38.9	39.0	39.0	38.9	39.1
Average hourly earnings (in dollars)	14.00	14.15	14.38	14.73	15.09	15.47	16.04	16.61	17.18
Average weekly earnings (in dollars)	533.40	537.70	553.63	573.00	587.00	603.33	625.56	646.13	671.74
Manufacturing:									
Average weekly hours	40.7	41.0	41.4	42.0	41.6	41.6	42.0	41.7	41.7
Average hourly earnings (in dollars)	11.18	11.46	11.74	12.07	12.37	12.77	13.17	13.49	13.91
Average weekly earnings (in dollars)	455.03	469.86	486.04	506.94	514.59	531.23	553.14	562.53	580.05
Transportation and public utilities:									
Average weekly hours	38.1	38.3	39.3	39.7	39.4	39.6	39.7	39.5	38.7
Average hourly earnings (in dollars)	13.20	13.43	13.55	13.78	14.13	14.45	14.92	15.31	15.69
Average weekly earnings (in dollars)	502.92	514.37	532.52	547.07	556.72	572.22	592.32	604.75	607.20
Wholesale trade:									
Average weekly hours	38.1	38.2	38.2	38.4	38.3	38.3	38.4	38.3	38.3
Average hourly earnings (in dollars)	11.15	11.39	11.74	12.06	12.43	12.87	13.45	14.07	14.58
Average weekly earnings (in dollars)	424.82	435.10	448.47	463.10	476.07	492.92	516.48	538.88	558.41
Retail trade:									
Average weekly hours	28.6	28.8	28.8	28.9	28.8	28.8	28.9	29.0	29.0
Average hourly earnings (in dollars)	6.94	7.12	7.29	7.49	7.69	7.99	8.33	8.74	9.08
Average weekly earnings (in dollars)	198.48	205.06	209.95	216.46	221.47	230.11	240.74	253.46	263.32
Finance, insurance, and real estate:									
Average weekly hours	35.7	35.8	35.8	35.8	35.9	35.9	36.1	36.4	36.2
Average hourly earnings (in dollars)	10.39	10.82	11.35	11.83	12.32	12.80	13.34	14.07	14.62
Average weekly earnings (in dollars)	370.92	387.36	406.33	423.51	442.29	459.52	481.57	512.15	529.24
Services:									
Average weekly hours	32.4	32.5	32.5	32.5	32.4	32.4	32.6	32.6	32.6
Average hourly earnings (in dollars)	10.23	10.54	10.78	11.04	11.39	11.79	12.28	12.84	13.36
Average weekly earnings (in dollars)	331.45	342.55	350.35	358.80	369.04	382.00	400.33	418.58	435.54

21. Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	1998				1999				2000	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2000	
Civilian workers[2]	136.3	137.4	139.0	139.8	140.4	141.8	143.3	144.6	146.5	1.3	4.3
Workers, by occupational group:											
White-collar workers	137.7	138.7	140.6	141.4	141.9	143.3	145.0	146.3	148.4	1.4	4.6
Professional specialty and technical	137.5	138.3	140.0	141.0	141.3	142.2	143.9	145.3	146.7	1.0	3.8
Executive, administrative, and managerial	139.1	139.7	141.7	141.8	143.5	145.4	147.3	148.6	150.5	1.3	4.9
Administrative support, including clerical	138.0	139.3	140.4	141.3	142.5	143.4	144.7	146.1	148.6	1.7	4.3
Blue-collar workers	133.2	134.3	135.3	136.1	137.1	138.3	139.5	140.6	142.7	1.5	4.1
Service occupations	136.9	137.9	139.4	140.0	141.3	142.4	143.1	144.8	146.0	.8	3.3
Workers, by industry division:											
Goods-producing	135.1	136.3	137.2	137.9	139.0	140.0	141.2	142.5	144.9	1.7	4.2
Manufacturing	136.4	137.2	138.2	138.9	139.9	140.9	142.1	143.6	146.0	1.7	4.4
Service-producing	136.8	137.7	139.6	140.4	140.9	142.4	144.0	145.3	147.1	1.2	4.4
Services	138.3	139.0	140.8	141.7	142.3	143.2	145.1	146.5	148.0	1.0	4.0
Health services	138.0	138.5	139.1	139.1	140.5	141.4	142.7	144.3	145.9	1.1	3.8
Hospitals	137.1	138.2	139.4	140.2	141.3	142.2	143.4	145.0	146.3	.9	3.5
Educational services	137.5	137.7	140.2	141.0	141.3	141.7	144.6	145.8	146.5	.5	3.7
Public administration[3]	136.4	137.4	138.9	139.9	140.8	141.5	142.4	144.4	145.7	.9	3.5
Nonmanufacturing	136.2	137.3	139.0	139.9	140.5	141.9	143.4	144.7	146.6	1.3	4.3
Private industry workers	136.3	137.5	139.0	139.8	140.4	142.0	143.3	144.6	146.8	1.5	4.6
Excluding sales occupations	136.4	137.5	138.8	139.4	140.5	141.9	143.2	144.5	146.5	1.4	4.3
Workers, by occupational group:											
White-collar workers	138.1	139.4	141.1	142.0	142.4	144.1	145.6	146.9	149.3	1.6	4.8
Excluding sales occupations	138.8	139.9	141.3	141.9	143.0	144.5	146.0	147.3	149.4	1.4	4.5
Professional specialty and technical occupations	138.8	140.1	141.6	142.6	142.9	144.1	145.2	146.7	148.4	1.2	3.8
Executive, administrative, and managerial occupations	139.4	140.0	141.9	141.8	143.7	145.8	147.7	149.1	151.1	1.3	5.1
Sales occupations	135.3	137.3	140.4	142.6	139.6	142.6	144.1	145.3	148.9	2.5	6.7
Administrative support occupations, including clerical	138.2	139.6	140.6	141.4	142.6	143.7	145.0	146.2	149.0	1.9	4.5
Blue-collar workers	133.1	134.3	135.2	135.9	136.9	138.2	139.4	140.5	142.6	1.5	4.2
Precision production, craft, and repair occupations	132.9	134.4	135.4	136.1	137.2	138.4	139.6	140.6	142.3	1.2	3.7
Machine operators, assemblers, and inspectors	133.6	134.7	135.7	136.8	137.3	138.4	139.9	141.4	144.0	1.8	4.9
Transportation and material moving occupations	129.3	129.9	130.7	130.7	131.6	133.6	134.4	135.2	137.5	1.7	4.5
Handlers, equipment cleaners, helpers, and laborers	137.0	137.6	138.5	139.2	141.0	142.3	143.2	144.4	146.4	1.4	3.8
Service occupations	135.3	136.0	137.3	138.0	139.5	140.6	141.0	142.6	143.9	.9	3.2
Production and nonsupervisory occupations[4]	135.3	136.6	138.0	139.0	139.3	140.8	141.9	143.1	145.3	1.5	4.3
Workers, by industry division:											
Goods-producing	135.1	136.2	137.1	137.8	138.9	139.9	141.1	142.5	144.8	1.6	4.2
Excluding sales occupations	134.5	135.6	136.5	137.2	138.3	139.3	140.5	141.8	144.2	1.7	4.3
White-collar occupations	137.7	138.8	139.7	140.2	141.7	142.7	143.9	145.5	148.1	1.8	4.5
Excluding sales occupations	136.3	137.4	138.3	138.8	140.4	141.3	142.5	143.9	146.5	1.8	4.4
Blue-collar occupations	133.5	134.6	135.5	136.3	137.1	138.3	139.4	140.7	142.8	1.5	4.2
Construction	130.6	132.7	133.4	134.3	135.6	136.9	137.9	138.7	140.8	1.5	3.8
Manufacturing	136.4	137.2	138.2	138.9	139.9	140.9	142.1	143.6	146.0	1.7	4.4
White-collar occupations	138.2	139.1	140.1	140.5	141.8	143.0	144.3	145.8	148.2	1.6	4.5
Excluding sales occupations	136.5	137.3	138.3	138.7	140.1	141.3	142.5	143.8	146.2	1.7	4.4
Blue-collar occupations	135.0	135.9	136.8	137.7	138.5	139.4	140.5	142.1	144.4	1.6	4.3
Durables	136.5	137.4	138.5	139.2	139.9	141.0	142.3	144.0	146.5	1.7	4.7
Nondurables	135.9	136.7	137.6	138.2	139.6	140.4	141.5	142.8	144.9	1.5	3.8
Service-producing	136.7	137.8	139.6	140.5	140.9	142.8	144.1	145.3	147.4	1.4	4.6
Excluding sales occupations	137.4	138.5	140.0	140.6	141.7	143.3	144.6	145.9	147.7	1.2	4.2
White-collar occupations	138.0	139.3	141.2	142.2	142.3	144.3	145.8	147.0	149.3	1.6	4.9
Excluding sales occupations	139.5	140.6	142.2	142.8	143.8	145.5	147.0	148.3	150.3	1.3	4.5
Blue-collar occupations	132.1	133.2	134.3	134.8	136.2	137.8	139.1	139.8	141.8	1.4	4.1
Service occupations	135.0	135.8	137.0	137.8	139.3	140.5	140.8	142.4	143.6	.8	3.1
Transportation and public utilities	135.8	137.1	138.5	139.3	139.7	140.9	141.8	142.3	143.9	1.1	3.0
Transportation	134.0	134.9	136.7	137.3	136.8	138.1	138.7	139.5	140.4	.6	2.6
Public utilities	137.9	139.7	140.7	141.9	143.4	144.6	145.7	146.1	148.6	1.7	3.6
Communications	136.6	139.2	140.5	141.7	143.3	144.9	146.1	146.0	148.4	1.6	3.6
Electric, gas, and sanitary services	139.6	140.3	141.0	142.1	143.4	144.2	145.1	146.1	148.9	1.9	3.8
Wholesale and retail trade	134.7	135.8	137.6	138.2	138.9	141.1	142.2	143.5	145.6	1.5	4.8
Excluding sales occupations	135.5	136.3	138.1	138.8	139.9	141.9	142.8	144.3	146.4	1.5	4.6
Wholesale trade	137.7	138.6	140.8	142.8	142.7	144.6	146.3	148.5	150.0	1.0	5.1
Excluding sales occupations	137.0	138.2	140.0	141.2	142.4	144.0	145.8	147.4	149.6	1.5	5.1
Retail trade	133.1	134.4	135.9	135.6	136.8	139.1	140.0	140.7	143.2	1.8	4.7
General merchandise stores	131.2	133.0	133.2	134.0	135.0	135.6	137.2	138.3	139.7	1.0	3.5
Food stores	131.3	132.9	133.7	132.7	134.3	135.7	137.0	138.1	140.1	1.4	4.3

See footnotes at end of table.

21. Continued—Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	1998				1999				2000	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2000	
Finance, insurance, and real estate	136.7	138.4	141.0	142.5	141.5	145.8	147.6	148.3	152.0	2.5	7.4
Excluding sales occupations	140.2	141.3	143.2	143.3	145.6	148.8	151.0	151.6	154.2	1.7	5.9
Banking, savings and loan, and other credit agencies	143.3	145.3	148.4	146.7	148.8	155.4	159.3	159.8	162.7	1.8	9.3
Insurance	137.4	138.9	141.9	141.7	141.7	144.0	144.5	145.8	149.9	2.8	5.8
Services	139.3	140.3	141.8	142.7	143.5	144.6	146.1	147.6	149.4	1.2	4.1
Business services	139.5	140.7	143.5	145.9	147.5	148.7	150.7	151.9	154.2	1.5	4.5
Health services	138.2	138.7	139.0	139.0	140.5	141.4	142.6	144.2	145.8	1.1	3.8
Hospitals	136.7	138.2	139.1	139.9	141.2	142.1	143.0	144.6	145.8	.8	3.3
Educational services	143.4	143.9	147.0	147.7	148.3	148.7	152.2	153.0	154.0	.7	3.8
Colleges and universities	144.3	144.8	147.8	148.5	149.2	149.6	152.6	153.3	154.6	.8	3.6
Nonmanufacturing	136.0	137.2	138.9	139.7	140.3	142.0	143.4	144.5	146.7	1.5	4.6
White-collar workers	137.9	139.2	141.1	142.0	142.3	144.1	145.6	146.9	149.2	1.6	4.8
Excluding sales occupations	139.3	140.5	142.0	142.7	143.7	145.3	146.8	148.1	150.2	1.4	4.5
Blue-collar occupations	131.0	132.4	133.4	134.0	135.2	136.8	138.0	138.7	140.6	1.4	4.0
Service occupations	134.9	135.7	136.9	137.7	139.2	140.4	140.7	142.3	143.5	.8	3.1
State and local government workers	136.5	136.9	139.0	139.8	140.5	141.0	143.1	144.6	145.5	.6	3.6
Workers, by occupational group:											
White-collar workers	136.1	136.2	138.4	139.3	139.8	140.2	142.6	144.0	144.9	.6	3.6
Professional specialty and technical	135.6	135.6	137.7	138.5	138.8	139.3	142.0	143.2	144.1	.6	3.8
Executive, administrative, and managerial	137.5	137.9	140.4	141.6	142.6	142.8	144.5	146.1	147.0	.6	3.1
Administrative support, including clerical	136.9	137.2	139.5	140.3	141.4	141.3	143.0	145.0	145.9	.6	3.2
Blue-collar workers	135.0	135.2	136.8	137.8	138.8	139.5	140.9	142.5	143.7	.8	3.5
Workers, by industry division:											
Services	136.5	136.6	139.0	139.7	140.0	140.5	143.2	144.5	145.2	.5	3.7
Services excluding schools[5]	136.1	136.2	138.7	138.8	139.6	140.3	142.6	143.8	145.2	1.0	4.0
Health services	137.9	138.0	140.3	140.7	141.2	142.0	144.2	145.8	147.3	1.0	4.3
Hospitals	138.4	138.4	140.7	141.2	141.7	142.7	144.8	146.3	147.9	1.1	4.4
Educational services	136.3	136.5	138.8	139.6	139.9	140.3	143.1	144.4	145.0	.4	3.6
Schools	136.6	136.7	139.1	139.9	140.2	140.6	143.5	144.7	145.3	.4	3.6
Elementary and secondary	136.1	136.2	138.8	139.3	139.6	140.0	142.9	144.1	144.5	.3	3.5
Colleges and universities	137.9	138.1	140.4	141.5	141.7	142.1	144.8	146.5	147.4	.6	4.0
Public administration[3]	136.4	137.4	138.9	139.9	140.8	141.5	142.4	144.4	145.7	.9	3.5

[1] Cost (cents per hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.

[2] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[3] Consists of legislative, judicial, administrative, and regulatory activities.

[4] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[5] Includes, for example, library, social, and health services.

22. Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	1998				1999				2000	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2000	
Civilian workers[1]	134.0	135.0	136.8	137.7	138.4	139.8	141.3	142.5	144.0	1.1	4.0
Workers, by occupational group:											
White-collar workers	135.6	136.7	138.8	139.7	140.1	141.6	143.3	144.6	146.2	1.1	4.4
Professional specialty and technical	135.8	136.6	138.5	139.4	140.1	141.0	142.6	144.0	144.9	.6	3.4
Executive, administrative, and managerial	137.4	138.3	140.5	140.3	141.6	143.8	145.9	147.2	148.6	1.0	4.9
Administrative support, including clerical	135.0	136.2	137.5	138.6	140.0	140.9	142.3	143.5	145.5	1.4	3.9
Blue-collar workers	130.4	131.4	132.6	133.3	134.5	135.8	137.0	137.9	139.2	.9	3.5
Service occupations	133.7	134.5	136.1	137.0	138.3	139.4	140.1	141.7	143.0	.9	3.4
Workers, by industry division:											
Goods-producing	132.0	133.3	134.4	135.2	136.3	137.4	138.6	139.7	141.3	1.1	3.7
Manufacturing	133.7	134.6	136.0	136.8	137.9	139.0	140.2	141.5	142.9	1.0	3.6
Service-producing	134.8	135.7	137.8	138.7	139.2	140.7	142.3	143.5	145.0	1.0	4.2
Services	136.9	137.6	139.6	140.5	141.5	142.3	144.1	145.5	146.6	.8	3.6
Health services	136.2	136.5	137.6	137.6	138.8	139.7	140.9	142.5	143.8	.9	3.6
Hospitals	134.2	135.1	136.4	137.1	138.1	138.8	140.1	141.6	142.6	.7	3.3
Educational services	136.3	136.5	139.1	140.0	140.2	140.6	143.7	144.7	145.3	.4	3.6
Public administration[2]	132.7	133.2	134.8	135.9	136 9	137.8	139.5	141.5	142.5	.7	4.1
Nonmanufacturing	134.0	135.1	137.0	137.8	138.4	139.9	141.5	142.6	144.2	1.1	4.2
Private industry workers	133.7	134.9	136.6	137.4	138.1	139.7	141.0	142.2	143.9	1.2	4.2
Excluding sales occupations	133.7	134.8	136.3	136.9	138.2	139.6	140.8	142.0	143.5	1.1	3.8
Workers, by occupational group:											
White-collar workers	135.7	137.0	139.0	139.9	140.3	142.1	143.5	144.8	146.6	1.2	4.5
Excluding sales occupations	136.3	137.5	139.1	139.7	141.0	142.5	143.9	145.2	146.7	1.0	4.0
Professional specialty and technical occupations	135.9	137.1	138.7	139.7	140.7	141.8	142.6	144.1	145.1	.7	3.1
Executive, administrative, and managerial occupations	137.8	138.7	140.9	140.5	141.9	144.3	146.4	147.6	149.2	1.1	5.1
Sales occupations	133.1	135.2	138.8	141.3	137.3	140.5	142.1	143.3	146.7	2.4	6.8
Administrative support occupations, including clerical	135.3	136.7	137.9	138.9	140.4	141.4	142.7	143.8	146.0	1.5	4.0
Blue-collar workers	130.2	131.3	132.4	133.2	134.3	135.6	136.8	137.7	139.1	1.0	3.6
Precision production, craft, and repair occupations	129.8	131.2	132.3	133.0	134.3	135.6	136.7	137.5	138.9	1.0	3.4
Machine operators, assemblers, and inspectors	131.6	132.7	133.8	134.9	135.7	136.7	138.3	139.5	140.7	.9	3.7
Transportation and material moving occupations	125.9	126.4	127.6	127.8	129.1	131.0	131.9	132.7	134.1	1.1	3.9
Handlers, equipment cleaners, helpers, and laborers	133.2	133.7	135.1	135.8	137.3	138.3	139.4	140.4	141.8	1.0	3.3
Service occupations	132.1	133.0	134.4	135.3	136.7	137.8	138.0	139.6	141.0	1.0	3.1
Production and nonsupervisory occupations[3]	132.3	133.6	135.2	136.4	136.8	138.2	139.3	140.4	142.1	1.2	3.9
Workers, by industry division:											
Goods-producing	132.0	133.2	134.3	135.2	136.3	137.3	138.5	139.7	141.3	1.1	3.7
Excluding sales occupations	131.3	132.5	133.6	134.4	135.5	136.6	137.8	138.9	140.5	1.2	3.7
White-collar occupations	135.0	136.3	137.4	138.2	139.4	140.5	141.7	143.0	145.0	1.4	4.0
Excluding sales occupations	133.3	134.6	135.7	136.4	137.8	138.8	140.1	141.3	143.2	1.3	3.9
Blue-collar occupations	130.1	131.3	132.3	133.3	134.3	135.4	136.6	137.6	139.0	1.0	3.5
Construction	126.0	128.1	128.5	129.3	130.7	131.9	133.0	133.6	136.0	1.8	4.1
Manufacturing	133.7	134.6	136.0	136.8	137.9	139.0	140.2	141.5	142.9	1.0	3.6
White-collar occupations	135.6	136.8	138.3	139.0	140.1	141.4	142.7	144.0	145.8	1.3	4.1
Excluding sales occupations	133.8	135.0	136.3	137.1	138.3	139.6	140.8	142.0	143.7	1.2	3.9
Blue-collar occupations	132.3	133.1	134.3	135.3	136.3	137.2	138.4	139.7	140.8	.8	3.3
Durables	133.4	134.5	135.9	136.9	137.9	139.1	140.4	141.8	143.0	.8	3.7
Nondurables	134.2	134.9	136.0	136.8	138.0	138.7	139.7	140.9	142.7	1.3	3.4
Service-producing	134.4	135.6	137.6	138.4	138.9	140.8	142.1	143.3	145.0	1.2	4.4
Excluding sales occupations	135.2	136.2	137.9	138.5	139.8	141.4	142.6	143.8	145.3	1.0	3.9
White-collar occupations	135.7	137.0	139.2	140.1	140.3	142.3	143.8	145.0	146.9	1.3	4.7
Excluding sales occupations	137.3	138.4	140.2	140.7	142.0	143.7	145.1	146.4	147.8	1.0	4.1
Blue-collar occupations	130.2	131.1	132.4	132.9	134.4	135.9	137.0	137.8	139.1	.9	3.5
Service occupations	132.1	133.0	134.2	135.2	136.7	137.8	138.0	139.6	141.1	1.1	3.2
Transportation and public utilities	132.1	132.8	134.3	135.1	135.4	136.8	137.5	137.9	138.5	.4	2.3
Transportation	130.1	130.4	132.4	132.9	132.3	133.7	134.4	134.9	134.9	.0	2.0
Public utilities	134.5	135.7	136.5	137.8	139.2	140.6	141.5	141.8	143.2	1.0	2.9
Communications	134.4	135.8	136.7	138.0	139.4	141.1	141.9	142.2	143.4	.8	2.9
Electric, gas, and sanitary services	134.7	135.6	136.3	137.4	138.9	140.0	140.9	141.3	143.0	1.2	3.0
Wholesale and retail trade	133.3	134.6	136.6	137.0	137.7	139.6	140.7	142.0	143.8	1.3	4.4
Excluding sales occupations	134.7	135.6	137.6	138.2	139.5	141.1	141.8	143.3	145.2	1.3	4.1
Wholesale trade	136.2	137.1	139.3	141.3	140.7	142.3	144.3	146.5	147.4	.6	4.8
Excluding sales occupations	136.5	137.8	139.6	140.8	141.9	143.0	144.8	146.4	147.9	1.0	4.2
Retail trade	131.9	133.3	135.2	134.8	136.2	138.3	138.9	139.6	142.1	1.8	4.3
General merchandise stores	129.4	131.5	132.2	133.0	133.7	134.3	135.6	136.7	137.8	.8	3.1
Food stores	129.0	130.5	131.7	130.5	131.8	132.8	133.9	134.9	136.7	1.3	3.7

See footnotes at end of table.

22. Continued—Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	1998				1999				2000	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2000	
Finance, insurance, and real estate	132.6	134.8	138.1	139.8	137.2	142.4	144.5	145.2	148.7	2.4	8.4
Excluding sales occupations	135.9	137.5	139.7	139.6	141.0	144.8	147.5	148.0	150.2	1.5	6.5
Banking, savings and loan, and other credit agencies	140.9	143.2	147.0	144.4	146.1	154.5	159.2	159.6	162.0	1.5	10.9
Insurance	133.1	134.8	138.7	138.5	137.4	139.8	140.2	141.5	145.5	2.8	5.9
Services	137.2	138.3	140.0	140.8	142.2	143.2	144.5	146.0	147.4	1.0	3.7
Business services	137.6	139.2	141.8	144.1	145.4	146.3	148.5	149.8	152.0	1.5	4.5
Health services	136.2	136.5	137.5	137.4	138.7	139.6	140.6	142.2	143.5	.9	3.5
Hospitals	133.6	134.7	135.8	136.5	137.6	138.3	139.3	140.9	141.8	.6	3.1
Educational services	139.1	139.6	142.8	143.5	143.9	144.2	147.5	148.2	148.9	.5	3.5
Colleges and universities	139.1	139.7	142.8	143.6	144.1	144.4	147.2	147.9	148.9	.7	3.3
Nonmanufacturing	133.4	134.7	136.5	137.4	137.9	139.7	141.0	142.1	143.9	1.3	4.4
White-collar workers	135.5	136.8	138.9	139.8	140.1	142.0	143.5	144.7	146.5	1.2	4.6
Excluding sales occupations	136.9	138.1	139.8	140.3	141.6	143.2	144.6	145.9	147.4	1.0	4.1
Blue-collar occupations	128.2	129.5	130.5	131.1	132.4	134.0	135.1	135.8	137.4	1.2	3.8
Service occupations	132.0	132.9	134.1	135.1	136.5	137.7	137.9	139.5	140.9	1.0	3.2
State and local government workers	135.1	135.4	137.6	138.5	139.0	139.6	142.2	143.5	144.3	.6	3.8
Workers, by occupational group:											
White-collar workers	135.0	135.2	137.6	138.5	138.9	139.3	142.1	143.4	144.1	.5	3.7
Professional specialty and technical	135.5	135.6	137.9	138.7	138.9	139.4	142.5	143.6	144.3	.5	3.9
Executive, administrative, and managerial	135.1	135.6	138.0	139.3	140.1	140.5	142.7	144.3	144.9	.4	3.4
Administrative support, including clerical	133.0	133.3	135.4	136.5	137.4	137.5	139.6	141.7	142.4	.5	3.6
Blue-collar workers	133.1	133.5	135.1	136.0	136.9	137.6	139.4	140.7	141.5	.6	3.4
Workers, by industry division:											
Services	135.7	135.9	138.4	139.2	139.5	139.9	142.9	144.0	144.6	.4	3.7
Services excluding schools[4]	135.4	135.5	137.8	138.2	139.0	139.6	142.1	143.2	144.3	.8	3.8
Health services	136.3	136.5	138.7	139.2	139.7	140.4	142.8	144.2	145.3	.8	4.0
Hospitals	136.3	136.5	138.6	139.1	139.7	140.6	142.8	144.1	145.3	.8	4.0
Educational services	135.7	135.8	138.4	139.3	139.5	139.8	142.9	144.0	144.5	.3	3.6
Schools	135.8	136.0	138.5	139.5	139.6	140.0	143.1	144.2	144.7	.3	3.7
Elementary and secondary	136.0	136.1	138.7	139.3	139.5	139.9	143.1	144.1	144.5	.3	3.6
Colleges and universities	135.2	135.5	137.7	139.6	139.6	139.8	142.6	144.4	144.9	.3	3.8
Public administration[2]	132.7	133.2	134.8	135.9	136.9	137.8	139.5	141.5	142.5	.7	4.1

[1] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[2] Consists of legislative, judicial, administrative, and regulatory activities.

[3] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[4] Includes, for example, library, social, and health services.

23. Employment Cost Index, benefits, private industry workers by occupation and industry group

[June 1989 = 100]

Series	1998				1999				2000	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2000	
Private industry workers	142.6	143.7	144.5	145.2	145.8	147.3	148.6	150.2	153.8	2.4	5.5
Workers, by occupational group:											
White-collar workers	144.7	145.6	146.6	147.4	147.9	149.4	151.0	152.5	156.3	2.5	5.7
Blue-collar workers	139.1	140.4	141.0	141.6	142.2	143.6	144.8	146.2	150.0	2.6	5.5
Workers, by industry division:											
Goods-producing	141.5	142.5	143.0	143.2	144.3	145.2	146.3	148.2	152.3	2.8	5.6
Service-producing	142.7	143.8	144.9	145.7	146.1	147.9	149.4	150.7	154.0	2.2	5.4
Manufacturing	141.7	142.4	142.6	142.7	143.6	144.5	145.7	147.8	152.3	3.0	6.1
Nonmanufacturing	142.7	143.9	145.0	145.8	146.3	148.0	149.4	150.7	154.0	2.2	5.3

24. Employment Cost Index, private nonfarm workers by bargaining status, region, and area size

[June 1989 = 100]

Series	1998				1999				2000	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended Mar. 2000	12 months ended Mar. 2000
COMPENSATION											
Workers, by bargaining status[1]											
Union	134.0	135.3	136.8	137.5	138.0	139.0	140.2	141.2	143.0	1.3	3.6
Goods-producing	132.7	134.3	135.6	136.5	136.8	138.2	139.2	140.8	143.3	1.8	4.8
Service-producing	135.3	136.2	138.0	138.5	139.2	139.7	141.0	141.4	142.5	.8	2.4
Manufacturing	133.6	134.6	136.0	136.9	137.0	138.1	139.1	141.0	144.5	2.5	5.5
Nonmanufacturing	133.9	135.3	136.9	137.4	138.1	139.2	140.3	140.8	141.7	.6	2.6
Nonunion	136.7	137.8	139.3	140.1	140.8	142.5	143.8	145.2	147.4	1.5	4.7
Goods-producing	135.9	136.9	137.7	138.3	139.7	140.5	141.8	143.1	145.4	1.6	4.1
Service-producing	136.7	138.0	139.7	140.6	141.1	143.0	144.4	145.7	148.0	1.6	4.9
Manufacturing	137.2	138.0	138.9	139.4	140.7	141.7	143.0	144.4	146.5	1.5	4.1
Nonmanufacturing	136.3	137.5	139.1	140.0	140.6	142.4	143.8	145.1	147.4	1.6	4.8
Workers, by region[1]											
Northeast	136.0	137.0	138.7	139.5	140.5	141.5	143.2	144.3	146.3	1.4	4.1
South	135.5	136.4	137.6	138.1	139.1	140.7	141.8	143.0	145.0	1.4	4.2
Midwest (formerly North Central)	138.3	139.6	140.9	141.4	141.7	143.6	145.0	146.3	148.9	1.8	5.1
West	135.2	136.6	138.5	140.0	140.3	142.1	143.3	144.7	147.0	1.6	4.8
Workers, by area size[1]											
Metropolitan areas	136.4	137.5	139.1	139.8	140.4	142.0	143.3	144.7	146.9	1.5	4.6
Other areas	135.9	137.1	138.2	139.4	140.5	141.8	143.1	143.6	146.0	1.7	3.9
WAGES AND SALARIES											
Workers, by bargaining status[1]											
Union	129.6	130.7	132.4	133.1	133.6	134.7	135.7	136.5	137.2	.5	2.7
Goods-producing	127.9	129.4	131.0	131.7	132.3	133.8	134.9	136.1	137.2	.8	3.7
Service-producing	131.8	132.2	134.1	134.8	135.4	135.8	136.8	137.2	137.6	.3	1.6
Manufacturing	129.6	130.4	132.2	133.0	133.6	134.7	135.8	137.5	138.8	.9	3.9
Nonmanufacturing	129.6	130.8	132.4	133.1	133.7	134.6	135.6	135.9	136.4	.4	2.0
Nonunion	134.5	135.7	137.4	138.3	139.0	140.7	142.0	143.3	145.1	1.3	4.4
Goods-producing	133.6	134.7	135.7	136.5	137.8	138.8	140.0	141.1	142.9	1.3	3.7
Service-producing	134.6	135.9	137.9	138.8	139.3	141.3	142.6	143.9	145.8	1.3	4.7
Manufacturing	135.1	136.2	137.3	138.2	139.4	140.5	141.7	142.9	144.4	1.0	3.6
Nonmanufacturing	134.0	135.3	137.1	138.0	138.6	140.5	141.8	143.0	145.0	1.4	4.6
Workers, by region[1]											
Northeast	132.6	133.8	135.4	136.4	137.1	138.2	139.9	140.9	142.3	1.0	3.8
South	134.0	134.9	136.5	136.7	137.9	139.4	140.2	141.5	143.0	1.1	3.7
Midwest (formerly North Central)	134.7	136.0	137.5	138.0	138.9	141.0	142.4	143.6	145.3	1.2	4.6
West	132.9	134.5	136.7	138.4	138.2	140.2	141.3	142.6	144.7	1.5	4.7
Workers, by area size[1]											
Metropolitan areas	133.8	135.1	136.9	137.7	138.3	139.9	141.2	142.5	144.1	1.1	4.2
Other areas	132.5	133.4	134.7	136.0	137.1	138.4	139.8	140.2	142.2	1.4	3.7

[1] The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the *Monthly Labor Review* Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

25. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, medium and large private establishments, selected years, 1980–97

Item	1980	1982	1984	1986	1988	1989	1991	1993	1995	1997
Scope of survey (in 000's)	21,352	21,043	21,013	21,303	31,059	32,428	31,163	28,728	33,374	38,409
Number of employees (in 000's):										
With medical care	20,711	20,412	20,383	20,238	27,953	29,834	25,865	23,519	25,546	29,340
With life insurance	20,498	20,201	20,172	20,451	28,574	30,482	29,293	26,175	29,078	33,495
With defined benefit plan	17,936	17,676	17,231	16,190	19,567	20,430	18,386	16,015	17,417	19,202
Time-off plans										
Participants with:										
Paid lunch time	10	9	9	10	11	10	8	9	–	–
Average minutes per day	–	25	26	27	29	26	30	29	–	–
Paid rest time	75	76	73	72	72	71	67	68	–	–
Average minutes per day	–	25	26	26	26	26	28	26	–	–
Paid funeral leave	–	–	–	88	85	84	80	83	80	81
Average days per occurrence	–	–	–	3.2	3.2	3.3	3.3	3.0	3.3	3.7
Paid holidays	99	99	99	99	96	97	92	91	89	89
Average days per year	10.1	10.0	9.8	10.0	9.4	9.2	10.2	9.4	9.1	9.3
Paid personal leave	20	24	23	25	24	22	21	21	22	20
Average days per year	–	3.8	3.6	3.7	3.3	3.1	3.3	3.1	3.3	3.5
Paid vacations	100	99	99	100	98	97	96	97	96	95
Paid sick leave [1]	62	67	67	70	69	68	67	65	58	56
Unpaid maternity leave	–	–	–	–	33	37	37	60	–	
Unpaid paternity leave	–	–	–	–	16	18	26	53	–	–
Unpaid family leave	–	–	–	–	–	–	–	–	84	93
Insurance plans										
Participants in medical care plans	97	97	97	95	90	92	83	82	77	76
Percent of participants with coverage for:										
Home health care	–	–	46	66	76	75	81	86	78	85
Extended care facilities	58	62	62	70	79	80	80	82	73	78
Physical exam	–	–	8	18	28	28	30	42	56	63
Percent of participants with employee contribution required for:										
Self coverage	26	27	36	43	44	47	51	61	67	69
Average monthly contribution	–	–	$11.93	$12.80	$19.29	$25.31	$26.60	$31.55	$33.92	$39.14
Family coverage	46	51	58	63	64	66	69	76	78	80
Average monthly contribution	–	–	$35.93	$41.40	$60.07	$72.10	$96.97	$107.42	$118.33	$130.07
Participants in life insurance plans	96	96	96	96	92	94	94	91	87	87
Percent of participants with:										
Accidental death and dismemberment insurance	69	72	74	72	78	71	71	76	77	74
Survivor income benefits	–	–	–	10	8	7	6	5	7	6
Retiree protection available	–	64	64	59	49	42	44	41	37	33
Participants in long-term disability insurance plans	40	43	47	48	42	45	40	41	42	43
Participants in sickness and accident insurance plans	54	51	51	49	46	43	45	44	–	–
Participants in short-term disability plans [1]	–	–	–	–	–	–	–	–	53	55
Retirement plans										
Participants in defined benefit pension plans	84	84	82	76	63	63	59	56	52	50
Percent of participants with:										
Normal retirement prior to age 65	55	58	63	64	59	62	55	52	52	52
Early retirement available	98	97	97	98	98	97	98	95	96	95
Ad hoc pension increase in last 5 years	–	–	47	35	26	22	7	6	4	10
Terminal earnings formula	53	52	54	57	55	64	56	61	58	56
Benefit coordinated with Social Security	45	45	56	62	62	63	54	48	51	49
Participants in defined contribution plans	–	–	–	60	45	48	48	49	55	57
Participants in plans with tax-deferred savings arrangements	–	–	–	33	36	41	44	43	54	55
Other benefits										
Employees eligible for:										
Flexible benefits plans	–	–	–	2	5	9	10	12	12	13
Reimbursement accounts [2]	–	–	–	5	12	23	36	52	38	32
Premium conversion plans	–	–	–	–	–	–	–	–	5	7

[1] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1995 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-terms disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[2] Prior to 1995, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

26. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, small private establishments and State and local governments, 1987, 1990, 1992, 1994, and 1996

Item	Small private establishments				State and local governments			
	1990	1992	1994	1996	1987	1990	1992	1994
Scope of survey (in 000's)	32,466	34,360	35,910	39,816	10,321	12,972	12,466	12,907
Number of employees (in 000's):								
With medical care	22,402	24,396	23,536	25,599	9,599	12,064	11,219	11,192
With life insurance	20,778	21,990	21,955	24,635	8,773	11,415	11,095	11,194
With defined benefit plan	6,493	7,559	5,480	5,883	9,599	11,675	10,845	11,708
Time-off plans								
Participants with:								
Paid lunch time	8	9	–	–	17	11	10	–
Average minutes per day	37	37	–	–	34	36	34	–
Paid rest time	48	49	–	–	58	56	53	–
Average minutes per day	27	26	–	–	29	29	29	–
Paid funeral leave	47	50	50	51	56	63	65	62
Average days per occurrence	2.9	3.0	3.1	3.0	3.7	3.7	3.7	3.7
Paid holidays	84	82	82	80	81	74	75	73
Average days per year[1]	9.5	9.2	7.5	7.6	10.9	13.6	14.2	11.5
Paid personal leave	11	12	13	14	38	39	38	38
Average days per year	2.8	2.6	2.6	3.0	2.7	2.9	2.9	3.0
Paid vacations	88	88	88	86	72	67	67	66
Paid sick leave [2]	47	53	50	50	97	95	95	94
Unpaid leave	17	18	–	–	57	51	59	–
Unpaid paternity leave	8	7	–	–	30	33	44	–
Unpaid family leave	–	–	47	48	–	–	–	93
Insurance plans								
Participants in medical care plans	69	71	66	64	93	93	90	87
Percent of participants with coverage for:								
Home health care	79	80	–	–	76	82	87	84
Extended care facilities	83	84	–	–	78	79	84	81
Physical exam	26	28	–	–	36	36	47	55
Percent of participants with employee contribution required for:								
Self coverage	42	47	52	52	35	38	43	47
Average monthly contribution	$25.13	$36.51	$40.97	$42.63	$15.74	$25.53	$28.97	$30.20
Family coverage	67	73	76	75	71	65	72	71
Average monthly contribution	$109.34	$150.54	$159.63	$181.53	$71.89	$117.59	$139.23	$149.70
Participants in life insurance plans	64	64	61	62	85	88	89	87
Percent of participants with:								
Accidental death and dismemberment insurance	78	76	79	77	67	67	74	64
Survivor income benefits	1	1	2	1	1	1	1	2
Retiree protection available	19	25	20	13	55	45	46	46
Participants in long-term disability insurance plans	19	23	20	22	31	27	28	30
Participants in sickness and accident insurance plans	6	26	26	–	14	21	22	21
Participants in short-term disability plans [2]	–	–	–	29	–	–	–	–
Retirement plans								
Participants in defined benefit pension plans	20	22	15	15	93	90	87	91
Percent of participants with:								
Normal retirement prior to age 65	54	50	–	47	92	89	92	92
Early retirement available	95	95	–	92	90	88	89	87
Ad hoc pension increase in last 5 years	7	4	–	–	33	16	10	13
Terminal earnings formula	58	54	–	53	100	100	100	99
Benefit coordinated with Social Security	49	46	–	44	18	8	10	49
Participants in defined contribution plans	31	33	34	38	9	9	9	9
Participants in plans with tax-deferred savings arrangements	17	24	23	28	28	45	45	24
Other benefits								
Employees eligible for:								
Flexible benefits plans	1	2	3	4	5	5	5	5
Reimbursement accounts [3]	8	14	19	12	5	31	50	64
Premium conversion plans	–	–	–	7	–	–	–	–

[1] Methods used to calculate the average number of paid holidays were revised in 1994 to count partial days more precisely. Average holidays for 1994 are not comparable with those reported in 1990 and 1992.

[2] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1996 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-term disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[3] Prior to 1996, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

27. Work stoppages involving 1,000 workers or more

Measure	Annual totals		1999											2000
	1997	1998	Jan.[P]	Feb.[P]	Mar.[P]	Apr.[P]	May[P]	June[P]	July[P]	Aug.[P]	Sept.[P]	Oct.[P]	Nov.[P]	Dec.[P]	Jan.[P]
Number of stoppages:															
Beginning in period	29	34	1	2	0	1	3	2	1	1	2	0	1	0	0
In effect during period	34	34	5	5	2	3	6	6	6	3	5	2	2	1	1
Workers involved:															
Beginning in period (in thousands)	339	387	1.4	4.1	.0	8.0	9.6	2.2	1.7	11.0	19.1	.0	2.0	.0	.0
In effect during period (in thousands)	351	387	9.2	10.3	4.4	12.4	22.0	21.6	16.3	15.4	34.5	10.1	5.0	3.0	3.0
Days idle:															
Number (in thousands)	4,497	5,116	129.0	104.1	101.2	256.8	314.8	309.4	266.4	118.8	176.2	67.1	63.6	63.0	60.0
Percent of estimated working time[1]	.01	.02	.01	([2])	([2])	.01	.01	.01	.01	([2])	.01	([2])	([2])	([2])	([2])

[1] Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is found in " 'Total economy' measures of strike idleness," *Monthly Labor Review*, October 1968, pp. 54–56.

[2] Less than 0.005.

[P] = preliminary.

28. Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	163.0	166.6	166.2	166.7	167.1	167.9	168.2	168.3	168.3	168.7	169.7	171.1	171.2	171.3	172.3
All items (1967 = 100)	488.3	499.0	497.9	499.2	500.7	502.9	503.9	504.1	504.1	505.5	508.4	512.5	512.9	513.3	516.1
Food and beverages	161.1	164.6	164.1	164.2	164.7	165.1	165.5	165.7	165.9	166.6	166.8	167.1	167.2	167.8	167.9
Food	160.7	164.1	163.6	163.8	164.2	164.6	165.1	165.2	165.4	166.1	166.3	166.5	166.6	167.3	167.3
Food at home	161.1	164.2	163.7	163.7	164.1	164.5	165.1	165.1	165.4	166.3	166.3	166.4	166.5	167.5	167.3
Cereals and bakery products	181.1	185.0	185.7	186.3	184.9	185.2	185.2	184.8	185.9	185.6	186.0	186.1	187.2	188.6	187.7
Meats, poultry, fish, and eggs	147.3	147.9	147.2	147.3	148.5	149.2	149.2	150.5	149.8	150.2	151.3	152.4	152.9	153.9	154.9
Dairy and related products[1]	150.8	159.6	156.1	155.7	156.5	158.7	164.1	164.6	162.1	160.4	160.9	159.1	160.6	159.6	159.5
Fruits and vegetables	198.2	203.1	203.2	202.0	202.1	202.6	202.2	201.2	204.5	208.4	203.0	201.7	201.6	204.3	199.9
Nonalcoholic beverages and beverage materials	133.0	134.3	134.3	134.3	134.5	134.2	134.6	133.9	134.7	137.1	138.4	138.5	137.6	137.3	137.5
Other foods at home	150.8	153.5	153.6	153.7	154.2	153.9	153.7	153.0	153.3	154.3	154.4	155.1	154.0	155.4	156.2
Sugar and sweets	150.2	152.3	152.4	152.4	152.7	153.5	153.3	152.1	152.3	154.8	154.4	154.6	152.4	153.7	154.0
Fats and oils	146.9	148.3	147.5	148.1	148.6	148.5	149.0	145.3	145.1	147.0	145.6	145.9	144.8	147.0	146.6
Other foods	165.5	168.9	169.2	169.3	169.9	169.2	168.7	169.0	169.4	169.8	170.5	171.6	170.7	172.1	173.4
Other miscellaneous foods[1,2]	102.6	104.9	104.9	104.2	104.8	105.3	104.3	103.9	105.7	104.3	106.4	107.0	105.2	106.4	108.4
Food away from home[1]	161.1	165.1	164.6	165.1	165.6	165.8	166.2	166.5	166.8	167.2	167.6	167.9	168.1	168.3	168.6
Other food away from home[1,2]	101.6	105.2	104.4	105.5	105.8	106.4	106.8	106.9	106.9	107.5	107.9	107.9	108.0	108.1	108.1
Alcoholic beverages	165.7	169.7	169.5	169.9	170.2	170.7	170.5	171.2	171.8	172.4	173.0	173.5	173.6	173.8	174.4
Housing	160.4	163.9	164.1	164.7	165.0	165.2	165.0	164.9	164.8	165.8	166.9	167.6	167.6	167.8	169.4
Shelter	182.1	187.3	187.2	188.0	188.3	188.3	188.5	188.6	188.6	189.8	190.7	191.8	191.8	192.0	192.9
Rent of primary residence	172.1	177.5	177.1	177.5	177.9	178.4	178.8	179.8	180.3	180.8	181.2	181.7	181.9	182.3	182.8
Lodging away from home	109.0	112.3	113.8	117.1	117.1	113.8	113.1	108.5	105.8	111.3	115.1	120.9	119.4	117.5	120.5
Owners' equivalent rent of primary residence[3]	187.8	192.9	192.6	193.0	193.4	193.9	194.2	194.9	195.2	195.7	196.1	196.4	196.8	197.2	197.7
Tenants' and household insurance[1,2]	99.8	101.3	102.2	102.1	102.2	102.3	102.2	102.1	102.2	102.4	102.4	102.6	103.1	103.8	103.9
Fuels and utilities	128.5	128.8	130.2	131.1	131.4	132.7	130.3	130.0	129.6	129.9	132.9	131.8	131.7	132.4	138.9
Fuels	113.7	113.5	115.1	116.0	116.2	117.6	115.0	114.6	114.1	114.3	117.6	116.3	116.1	116.8	124.0
Fuel oil and other fuels	90.0	91.4	87.3	87.5	89.2	93.9	97.6	100.7	106.3	114.4	147.2	130.1	123.7	121.6	120.9
Gas (piped) and electricity	121.2	120.9	123.0	124.0	124.1	125.3	122.0	121.4	120.3	119.8	120.6	120.7	121.0	122.0	130.2
Household furnishings and operations	126.6	126.7	126.8	126.8	126.8	127.0	126.6	126.4	126.4	127.0	127.2	127.9	128.2	128.1	128.1
Apparel	133.0	131.3	130.9	127.3	127.5	131.8	134.6	133.6	130.1	126.8	129.2	132.5	133.3	132.2	128.3
Men's and boys' apparel	131.8	131.1	131.4	128.3	127.1	130.5	134.0	133.2	131.5	129.2	130.0	131.5	131.6	132.6	129.4
Women's and girls' apparel	126.0	123.3	122.6	116.1	117.9	125.4	128.4	126.6	121.8	116.0	120.0	125.9	126.7	124.4	119.2
Infants' and toddlers' apparel[1]	126.1	129.0	126.8	127.4	128.3	129.9	132.4	132.6	133.0	133.3	133.1	133.9	132.3	131.7	130.5
Footwear	128.0	125.7	125.4	125.2	123.8	124.7	126.1	126.4	123.7	121.6	122.1	124.7	126.7	126.1	123.9
Transportation	141.6	144.4	143.4	144.7	145.7	146.5	147.3	147.6	148.3	148.3	149.7	153.4	152.9	153.1	155.7
Private transportation	137.9	140.5	139.7	140.6	141.9	142.9	143.3	143.6	144.4	144.4	145.6	149.2	148.7	148.8	151.4
New and used motor vehicles[2]	100.1	100.1	99.7	99.8	99.7	100.1	100.5	100.9	101.1	100.8	100.3	100.4	100.8	101.0	100.8
New vehicles	143.4	142.9	142.5	142.0	141.4	141.6	142.3	143.1	143.6	143.3	143.0	143.3	143.5	143.3	142.9
Used cars and trucks[1]	150.6	152.0	150.9	152.3	153.8	155.7	156.4	156.1	155.0	153.9	153.0	153.0	154.0	155.4	155.7
Motor fuel	92.2	100.7	99.2	102.5	107.8	110.3	110.0	109.3	112.2	112.6	118.1	131.7	128.7	128.3	139.0
Gasoline (all types)	91.6	100.1	98.6	101.9	107.2	109.7	109.4	108.7	111.5	111.9	117.3	130.9	127.9	127.6	138.3
Motor vehicle parts and equipment	101.1	100.5	100.1	100.0	100.1	100.6	100.5	101.2	100.8	100.8	100.9	101.4	101.0	101.1	101.2
Motor vehicle maintenance and repair	167.1	171.9	171.7	172.1	172.1	172.8	173.2	173.6	173.8	174.6	175.2	175.7	175.9	176.3	176.8
Public transportation	190.3	197.7	192.6	200.8	197.1	194.7	201.5	202.2	201.2	199.5	204.2	209.8	209.2	210.4	212.6
Medical care	242.1	250.6	250.2	251.1	251.9	252.3	252.8	253.3	254.2	255.5	257.0	258.1	258.8	259.4	260.5
Medical care commodities	221.8	230.7	230.5	231.7	232.5	233.1	233.2	233.7	234.6	235.2	235.5	236.3	237.0	237.5	238.2
Medical care services	246.8	255.1	254.6	255.5	256.2	256.6	257.1	257.7	258.5	260.1	262.0	263.2	263.9	264.4	265.6
Professional services	222.2	229.2	229.3	229.8	230.1	230.4	230.9	231.4	231.7	233.1	234.9	236.1	236.6	237.1	237.9
Hospital and related services	287.5	299.5	297.6	299.3	301.3	302.1	302.9	303.9	306.3	308.4	310.5	311.5	312.7	313.5	315.6
Recreation[2]	101.1	102.1	102.2	102.2	102.2	101.7	101.8	101.9	102.0	102.3	102.5	102.9	102.9	103.1	103.4
Video and audio[1,2]	101.1	100.7	100.7	100.6	100.9	100.1	100.1	100.1	100.1	100.5	100.8	100.9	100.3	101.3	101.5
Education and communication[2]	100.3	101.2	100.3	100.4	101.2	101.9	102.1	102.2	102.3	102.7	102.2	102.0	101.8	101.8	101.5
Education[2]	102.1	107.0	105.7	106.0	107.5	109.4	109.6	109.3	109.3	110.2	110.6	110.6	110.7	110.9	111.5
Educational books and supplies	250.8	261.7	262.1	262.3	264.5	267.0	269.0	255.7	256.0	273.9	278.3	276.9	276.7	276.8	277.5
Tuition, other school fees, and child care	294.2	308.4	304.4	305.4	309.9	315.3	315.9	316.3	316.3	317.3	318.0	318.3	318.7	319.2	320.9
Communication[1,2]	98.7	96.0	95.5	95.5	95.6	95.3	95.3	95.9	95.9	96.0	94.7	94.3	93.8	93.7	92.6
Information and information processing[1,2]	98.5	95.5	94.9	94.9	95.0	94.7	94.7	95.3	95.4	95.5	94.1	93.6	93.1	93.0	91.8
Telephone services[1,2]	100.7	100.1	99.7	99.5	99.8	99.6	99.8	100.6	100.7	100.9	99.4	98.9	98.6	98.5	97.2
Information and information processing other than telephone services[1,4]	39.9	30.5	29.8	30.0	29.8	29.3	28.7	28.2	28.2	28.0	27.6	27.2	26.7	26.6	26.0
Personal computers and peripheral equipment[1,2]	78.2	53.5	54.5	52.9	50.9	49.7	48.2	47.0	47.2	46.4	45.1	44.2	42.7	42.4	41.2
Other goods and services	237.7	258.3	255.9	258.3	257.6	262.6	263.2	263.0	263.0	264.7	266.7	268.0	271.9	270.2	269.6
Tobacco and smoking products	274.8	355.8	343.2	356.0	350.1	373.8	373.3	369.8	369.1	375.1	383.0	387.3	404.4	393.5	388.5
Personal care[1]	156.7	161.1	161.1	161.1	161.4	161.8	162.4	162.8	162.9	163.4	163.8	164.3	164.8	165.1	165.4
Personal care products[1]	148.3	151.8	152.6	152.0	152.3	153.0	153.4	153.3	152.5	152.8	152.8	153.5	153.4	153.0	153.6
Personal care services[1]	166.0	171.4	170.9	171.4	171.9	172.1	172.9	173.9	174.3	174.9	175.6	176.2	176.2	177.3	177.9

28. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Miscellaneous personal services	234.7	243.0	242.4	242.9	243.9	244.6	245.6	246.0	246.6	247.6	248.9	249.4	250.9	251.7	252.0
Commodity and service group:															
Commodities	141.9	144.4	143.9	143.9	144.5	145.8	146.4	146.2	146.1	146.2	147.4	149.2	149.3	149.2	149.7
Food and beverages	161.1	164.6	164.1	164.2	164.7	165.1	165.5	165.7	165.9	166.6	166.8	167.1	167.2	167.8	167.9
Commodities less food and beverages	130.5	132.5	131.9	131.9	132.5	134.3	134.9	134.6	134.4	134.0	135.7	138.4	138.4	138.0	138.6
Nondurables less food and beverages	132.6	137.5	136.6	136.7	138.0	141.0	141.9	141.3	140.9	140.5	143.9	148.5	148.5	147.6	149.1
Apparel	133.0	131.3	130.9	127.3	127.5	131.8	134.6	133.6	130.1	126.8	129.2	132.5	133.3	132.2	128.3
Nondurables less food, beverages, and apparel	137.4	146.0	144.8	146.8	148.8	151.2	151.2	150.7	152.1	153.1	157.2	162.7	162.3	161.5	165.8
Durables	127.6	126.0	125.7	125.6	125.4	125.7	125.9	126.0	125.9	125.7	125.3	125.6	125.6	125.8	125.4
Services	184.2	188.8	188.6	189.5	189.9	190.1	190.2	190.5	190.5	191.4	192.2	193.1	193.3	193.6	195.0
Rent of shelter[3]	189.6	195.0	194.9	195.7	196.1	196.1	196.3	196.3	196.3	197.6	198.5	199.7	199.8	199.9	200.8
Transporatation services	187.9	190.7	189.3	191.0	190.2	189.9	191.9	192.7	192.8	193.0	193.7	195.0	195.2	195.7	196.1
Other services	216.9	223.1	222.2	222.6	223.9	224.5	225.1	226.0	226.5	227.4	227.4	227.8	228.0	228.4	228.7
Special indexes:															
All items less food	163.4	167.0	166.7	167.2	167.7	168.5	168.8	168.8	168.8	169.2	170.3	171.9	172.0	172.1	173.2
All items less shelter	157.2	160.2	159.7	160.1	160.6	161.6	162.0	162.1	162.1	162.3	163.3	164.8	164.9	165.1	166.0
All items less medical care	158.6	162.0	161.6	162.0	162.5	163.2	163.6	163.6	163.6	164.0	164.9	166.3	166.4	166.5	167.5
Commodities less food	132.0	134.0	133.4	133.4	134.0	135.8	136.3	136.1	135.9	135.6	137.2	139.9	139.9	139.4	140.1
Nondurables less food	134.6	139.4	138.6	138.7	139.9	142.8	143.7	143.1	142.8	142.4	145.7	150.1	150.1	149.3	150.7
Nondurables less food and apparel	139.2	147.5	146.3	148.2	150.0	152.3	152.3	151.9	153.2	154.2	158.0	163.0	162.7	161.9	166.0
Nondurables	146.9	151.2	150.5	150.6	151.5	153.2	154.0	153.7	153.6	153.7	155.6	158.1	158.2	158.0	158.8
Services less rent of shelter[3]	191.8	195.8	195.6	196.5	196.9	197.3	197.4	197.9	198.0	198.6	199.2	199.9	200.2	200.9	202.9
Services less medical care services	178.4	182.7	182.6	183.4	183.8	183.9	184.1	184.3	184.3	185.1	185.8	186.7	186.9	187.2	188.6
Energy	102.9	106.6	106.8	108.7	111.3	113.2	111.6	111.2	112.2	112.5	116.7	122.2	120.7	121.0	129.6
All items less energy	170.9	174.4	174.0	174.3	174.5	175.1	175.7	175.8	175.7	176.2	176.8	177.7	178.0	178.1	178.2
All items less food and energy	173.4	177.0	176.6	176.9	177.1	177.7	178.3	178.4	178.2	178.7	179.4	180.4	180.7	180.8	180.8
Commodities less food and energy	143.2	144.1	143.7	143.2	143.0	144.6	145.3	145.0	144.2	143.6	144.2	145.3	145.9	145.5	144.5
Energy commodities	92.1	100.0	98.3	101.3	106.3	109.1	109.1	108.7	111.8	112.8	120.6	131.7	128.4	127.9	137.6
Services less energy	190.6	195.7	195.3	196.1	196.5	196.6	197.2	197.5	197.7	198.7	199.5	200.5	200.7	200.9	201.6
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	159.7	163.2	162.8	163.3	163.8	164.7	165.0	165.1	165.1	165.5	166.4	167.8	167.9	168.1	169.1
All items (1967 = 100)	475.6	486.2	485.0	486.3	487.8	490.5	491.5	491.7	491.8	492.9	495.6	499.7	500.1	500.7	503.8
Food and beverages	160.4	163.8	163.3	163.4	163.9	164.3	164.7	164.9	165.2	165.9	166.1	166.4	166.5	167.2	167.3
Food	160.0	163.4	162.8	163.0	163.5	163.9	164.4	164.5	164.7	165.4	165.6	165.9	166.0	166.7	166.8
Food at home	160.0	163.0	162.5	162.5	162.9	163.5	164.0	164.0	164.2	165.1	165.1	165.3	165.4	166.4	166.3
Cereals and bakery products	180.9	184.7	185.5	186.1	184.8	185.0	185.0	184.5	185.7	185.5	185.8	185.9	186.9	188.4	187.3
Meats, poultry, fish, and eggs	147.0	147.6	146.9	146.8	148.2	148.9	148.8	150.1	149.4	149.8	150.8	152.0	152.5	153.5	154.6
Dairy and related products[1]	150.4	159.4	155.7	155.3	156.0	158.4	164.0	164.6	161.9	159.9	160.4	158.7	160.2	159.3	159.4
Fruits and vegetables	197.0	201.8	201.9	201.0	201.2	201.6	201.0	199.8	202.8	207.0	201.7	200.5	200.5	203.1	198.9
Nonalcoholic beverages and beverage materials	131.8	133.2	133.2	133.1	133.2	133.0	133.4	132.7	133.5	136.0	137.6	137.8	136.7	136.4	136.7
Other foods at home	150.2	152.8	152.8	153.0	153.5	153.3	152.9	152.3	152.7	153.7	153.8	154.5	153.4	154.9	155.6
Sugar and sweets	150.1	152.2	152.0	152.0	152.6	153.3	153.2	152.0	152.3	154.8	154.3	154.5	152.3	153.6	153.9
Fats and oils	146.5	147.9	147.2	147.8	148.3	148.1	148.6	144.9	144.7	146.8	145.2	145.7	144.5	146.9	146.4
Other foods	165.4	168.8	169.0	169.2	169.7	169.2	168.5	168.8	169.4	169.8	170.5	171.6	170.7	172.2	173.4
Other miscellaneous foods[1,2]	102.6	104.6	104.4	103.9	104.4	105.1	103.8	103.4	105.2	103.9	106.2	106.7	104.7	106.1	108.0
Food away from home[1]	161.1	165.0	164.4	164.9	165.5	165.8	166.1	166.5	166.8	167.1	167.6	167.9	168.1	168.3	168.6
Other food away from home[1,2]	101.6	105.1	104.5	105.3	105.8	106.2	106.6	106.8	106.9	107.4	107.8	107.8	108.3	108.5	108.4
Alcoholic beverages	164.6	168.8	168.7	169.1	169.2	169.8	169.5	170.4	171.0	171.6	172.2	172.8	172.9	172.9	173.6
Housing	156.7	160.0	160.2	160.7	161.0	161.3	161.0	161.1	161.1	161.8	162.7	163.2	163.3	163.6	165.2
Shelter	176.6	181.6	181.5	182.0	182.4	182.6	182.8	183.1	183.3	184.1	184.8	185.6	185.8	186.1	186.8
Rent of primary residence	171.7	177.1	176.8	177.1	177.5	178.0	178.4	179.3	179.9	180.3	180.7	181.2	181.4	181.8	182.3
Lodging away from home[2]	109.0	122.2	113.8	116.7	116.8	113.8	113.1	108.4	105.7	110.8	114.5	119.9	118.7	117.8	120.9
Owners' equivalent rent of primary residence[3]	171.1	175.7	175.4	175.7	176.1	176.5	176.8	177.4	177.8	178.2	178.6	178.8	179.1	179.5	180.0
Tenants' and household insurance[1,2]	100.0	101.6	102.3	102.2	102.3	102.5	102.4	102.3	102.4	102.6	102.6	102.8	103.3	104.0	104.1
Fuels and utilities	128.4	128.7	130.2	131.1	131.4	132.6	130.1	129.8	129.2	129.5	132.0	131.2	131.1	131.9	138.7
Fuels	113.3	113.0	114.7	115.7	115.9	117.2	114.4	114.0	113.5	113.6	116.3	115.4	115.2	116.0	123.3
Fuel oil and other fuels	90.3	91.7	87.8	87.6	89.3	93.9	97.7	100.7	106.0	114.0	144.5	129.6	123.0	120.9	120.2
Gas (piped) and electricity	120.8	120.4	122.6	123.6	123.7	124.9	121.5	120.9	119.8	119.4	120.1	120.2	120.5	121.6	129.9
Household furnishings and operations	125.0	124.7	124.8	124.9	124.7	124.8	124.5	124.2	124.2	124.5	124.6	125.3	125.6	125.5	125.3
Apparel	131.6	130.1	129.6	126.4	126.4	130.5	133.1	132.3	129.0	125.9	127.9	131.0	131.8	130.9	127.3
Men's and boys' apparel	131.4	131.2	131.6	128.6	127.2	130.3	134.0	133.3	131.6	129.3	129.9	131.5	131.5	132.7	129.5
Women's and girls' apparel	123.9	121.3	120.6	114.4	116.0	123.3	126.0	124.4	119.8	114.2	118.0	123.5	124.3	122.1	117.4
Infants' and toddlers' apparel[1]	126.7	130.3	128.0	128.4	129.6	131.4	134.1	134.3	134.8	134.9	134.7	135.7	134.1	133.4	132.0
Footwear	128.7	126.2	125.8	125.8	124.4	125.1	126.6	126.9	124.2	122.3	122.6	124.7	127.1	126.6	124.6
Transportation	140.5	143.4	142.4	143.7	145.0	146.0	146.6	146.9	147.6	147.7	149.1	152.9	152.2	152.5	155.5
Private transportation	138.0	140.7	139.9	140.9	142.4	143.6	143.9	144.2	145.0	145.1	146.4	150.1	149.5	149.7	152.8
New and used motor vehicles[2]	100.3	100.4	100.0	100.1	100.2	100.7	101.2	101.5	101.5	101.2	100.7	100.8	101.2	101.5	101.4

28. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
New vehicles	144.6	144.0	143.6	143.2	142.6	142.8	143.5	144.3	144.7	144.5	144.2	144.5	144.7	144.5	144.1
Used cars and trucks[1]	152.0	153.3	152.2	153.7	155.2	157.0	157.7	157.3	156.3	155.3	154.4	154.4	155.4	156.8	157.1
Motor fuel	92.2	100.8	99.2	102.6	107.8	110.6	110.0	109.5	112.3	112.9	118.6	132.0	128.5	128.5	140.1
Gasoline (all types)	91.7	100.2	98.7	102.1	107.3	110.0	109.4	108.9	111.7	112.3	117.9	131.2	127.8	127.9	139.4
Motor vehicle parts and equipment	100.5	100.0	99.6	99.5	99.6	99.9	99.8	100.6	100.2	100.3	100.5	100.9	100.6	100.5	100.5
Motor vehicle maintenance and repair	168.2	173.3	173.1	173.5	173.5	174.3	174.7	175.1	175.2	176.1	176.6	177.2	177.4	177.8	178.3
Public transportation	187.1	193.1	189.0	195.7	192.5	190.7	196.3	197.0	196.0	194.8	198.8	203.4	202.9	203.9	205.5
Medical care	241.4	249.7	249.4	250.3	251.0	251.4	251.9	252.5	253.2	254.5	256.2	257.3	258.0	258.5	259.7
Medical care commodities	218.6	226.8	226.6	227.8	228.4	229.0	229.1	229.5	230.2	230.7	231.0	231.8	232.4	232.9	233.7
Medical care services	246.6	254.9	254.5	255.3	256.0	256.4	257.0	257.6	258.4	259.9	261.9	263.1	263.8	264.4	265.6
Professional services	223.7	230.8	231.0	231.4	231.7	232.0	232.5	233.1	233.4	234.8	236.7	238.0	238.6	239.0	239.9
Hospital and related services	283.6	295.5	293.6	295.3	297.3	298.2	298.9	299.8	302.1	304.1	306.4	307.5	308.7	309.5	311.7
Recreation[2]	100.9	101.3	101.6	101.6	101.5	101.0	101.1	101.0	101.2	101.4	101.6	102.0	102.0	102.3	102.5
Video and audio[1,2]	101.1	100.5	100.5	100.4	100.7	99.8	99.9	99.9	99.8	100.2	100.4	100.6	100.0	101.0	101.2
Education and communication[2]	100.4	101.5	100.7	100.8	101.5	102.1	102.3	102.5	102.5	103.0	102.5	102.2	102.1	102.1	101.7
Education[2]	102.1	107.2	106.0	106.3	107.7	109.5	109.7	109.4	109.4	110.5	110.9	111.0	111.1	111.3	111.8
Educational books and supplies	253.1	264.1	264.8	265.0	267.2	269.9	271.8	256.5	256.9	276.6	281.3	280.0	279.9	280.0	280.9
Tuition, other school fees, and child care	288.5	302.8	299.2	300.2	304.1	309.5	310.0	310.4	310.4	311.7	312.7	312.8	313.4	313.8	315.4
Communication[1,2]	99.1	96.9	96.4	96.3	96.5	96.2	96.3	96.9	97.0	97.1	95.7	95.3	94.8	94.7	93.6
Information and information processing[1,2]	99.0	96.5	96.0	96.0	96.1	95.8	95.9	96.6	96.6	96.7	95.3	94.8	94.4	94.3	93.0
Telephone services[1,2]	100.7	100.2	99.9	99.7	99.9	99.7	100.0	100.8	100.9	101.1	99.6	99.1	98.8	98.7	97.4
Information and information processing other than telephone services[1,4]	41.2	31.6	30.8	31.1	30.8	30.3	29.9	29.3	29.3	28.9	28.6	28.2	27.6	27.5	27.0
Personal computers and peripheral equipment[1,2]	77.9	53.1	54.0	52.5	50.6	49.4	48.1	46.9	46.9	45.7	44.5	43.6	42.0	41.8	40.7
Other goods and services	236.1	261.9	258.7	262.0	260.7	267.3	267.9	267.4	267.3	269.3	271.7	273.3	278.0	275.4	274.5
Tobacco and smoking products	274.8	356.2	343.5	356.6	350.6	374.4	374.0	370.4	369.7	375.7	383.6	387.8	404.9	393.7	388.7
Personal care[1]	156.8	161.3	161.3	161.3	161.6	161.9	162.6	163.0	163.1	163.5	163.9	164.3	164.6	164.9	165.3
Personal care products[1]	149.3	152.5	153.3	152.7	153.1	153.7	154.1	154.0	153.1	153.4	153.2	154.1	153.9	153.4	154.0
Personal care services[1]	166.3	171.7	171.2	171.8	172.2	172.4	173.2	174.4	174.7	175.3	176.1	176.6	176.6	177.7	178.3
Miscellaneous personal services	234.0	243.1	242.6	243.2	243.8	244.5	245.5	245.9	246.7	247.6	248.9	249.4	250.4	251.2	251.4
Commodity and service group:															
Commodities	141.8	144.7	144.0	144.2	144.8	146.3	146.8	146.6	146.6	146.6	147.8	149.8	149.9	149.9	150.6
Food and beverages	160.4	163.8	163.3	163.4	163.9	164.3	164.7	164.9	165.2	165.9	166.1	166.4	166.5	167.2	167.3
Commodities less food and beverages	130.6	133.2	132.5	132.7	133.4	135.4	165.9	135.6	135.4	135.1	136.8	139.6	139.6	139.3	140.3
Nondurables less food and beverages	132.1	138.1	137.0	137.5	138.8	142.1	142.9	142.2	142.0	141.7	145.1	150.2	150.2	149.4	151.5
Apparel	131.6	130.1	129.6	126.4	126.4	130.5	133.1	132.3	129.0	125.9	127.9	131.0	131.8	130.9	127.3
Nondurables less food, beverages, and apparel	137.0	147.2	145.7	148.1	150.2	153.2	153.1	152.5	153.9	155.0	159.3	165.7	165.2	164.4	169.6
Durables	127.3	126.0	125.6	125.7	125.7	126.1	126.3	126.4	126.3	126.0	125.6	125.8	126.0	126.2	125.9
Services	181.0	185.3	185.2	185.9	186.3	186.6	186.7	187.1	187.2	187.9	188.5	189.2	189.4	189.8	191.2
Rent of shelter[3]	170.1	174.9	174.7	175.3	175.6	175.8	176.1	176.3	176.5	177.3	178.0	178.7	178.9	179.2	179.9
Transporatation services	185.4	187.9	186.7	188.0	187.4	187.3	189.0	189.8	189.9	190.2	190.8	191.8	192.0	192.4	192.6
Other services	213.7	219.6	218.8	219.2	220.3	220.9	221.6	222.3	222.9	223.8	223.7	224.0	224.2	224.6	224.7
Special indexes:															
All items less food	159.5	163.1	162.7	163.2	163.7	164.7	165.0	165.1	165.1	165.4	166.4	168.0	168.2	168.3	169.5
All items less shelter	155.0	158.1	157.6	158.0	158.6	159.7	160.1	160.1	160.1	160.3	161.3	162.8	163.0	163.1	164.3
All items less medical care	155.8	159.2	158.8	159.2	159.7	160.7	161.0	161.1	161.1	161.4	162.3	163.6	163.8	164.0	165.0
Commodities less food	132.0	134.6	133.9	134.2	134.8	136.7	137.2	137.0	136.8	136.5	138.2	141.0	141.0	140.7	141.7
Nondurables less food	134.1	140.0	138.9	139.4	140.7	143.8	144.6	144.0	143.8	143.6	146.8	151.7	151.7	150.9	152.9
Nondurables less food and apparel	138.7	148.4	147.0	149.3	151.2	154.0	153.8	153.4	154.7	155.8	159.8	165.7	165.3	164.5	169.4
Nondurables	146.5	151.3	150.5	150.8	151.7	153.6	154.3	154.0	154.0	154.2	156.0	158.8	158.9	158.8	159.9
Services less rent of shelter[3]	170.7	174.1	174.0	174.7	175.0	175.5	175.4	175.8	175.9	176.4	176.9	177.4	177.7	178.2	180.2
Services less medical care services	175.4	179.5	179.4	180.1	180.4	180.7	180.8	181.1	181.2	181.9	182.4	183.1	183.3	183.7	185.1
Energy	102.1	106.1	106.2	108.4	111.1	113.1	111.4	111.0	112.1	112.5	116.7	122.9	121.0	121.5	130.9
All items less energy	167.6	171.1	170.6	170.9	171.1	171.8	172.4	172.6	172.5	172.8	173.3	174.1	174.5	174.6	174.6
All items less food and energy	169.6	173.1	172.7	172.9	173.1	173.9	174.5	174.7	174.5	174.8	175.3	176.2	176.7	176.7	176.6
Commodities less food and energy	142.7	144.3	143.8	143.5	143.3	145.0	145.7	145.4	144.6	144.1	144.6	145.6	146.4	146.0	145.0
Energy commodities	92.3	100.3	98.6	101.8	106.8	109.7	109.4	109.1	112.1	113.1	120.4	132.0	128.3	128.3	139.1
Services less energy	187.7	192.6	192.2	192.8	193.2	193.4	194.0	194.4	194.7	195.5	196.2	196.9	197.1	197.5	198.0

[1] Not seasonally adjusted.

[2] Indexes on a December 1997 = 100 base.

[3] Indexes on a December 1982 = 100 base.

[4] Indexes on a December 1988 = 100 base.

NOTE: Index applies to a month as a whole, not to any specific date.

29. Consumer Price Index: U.S. city average and available local area data: all items

[1982–84 = 100, unless otherwise indicated]

Area	Pricing schedule[1]	All Urban Consumers							Urban Wage Earners						
		1999		2000					1999		2000				
		May	June	Feb.	Mar.	Apr.	May	June	May	June	Feb.	Mar.	Apr.	May	June
U.S. city average	M	166.2	166.2	169.7	171.1	171.2	171.3	172.3	162.8	162.8	166.4	167.8	167.9	168.1	169.1
Region and area size[2]															
Northeast urban	M	172.8	173.1	177.4	178.3	178.4	178.2	178.8	169.7	170.0	174.3	175.1	175.3	175.3	175.8
Size A—More than 1,500,000	M	173.6	174.1	178.3	179.2	179.1	179.0	179.6	169.4	169.9	174.1	174.9	175.0	175.0	175.5
Size B/C—50,000 to 1,500,000[3]	M	103.9	103.8	106.7	107.2	107.4	107.3	107.6	103.5	103.4	106.3	106.8	107.0	106.9	107.2
Midwest urban[4]	M	162.2	162.5	165.8	167.0	166.9	167.4	169.5	158.3	158.5	162.1	163.4	163.2	163.8	166.1
Size A—More than 1,500,000	M	163.6	164.1	167.2	168.3	168.2	169.0	171.2	158.9	159.3	162.7	163.8	163.6	164.5	166.8
Size B/C—50,000 to 1,500,000[3]	M	103.7	103.7	106.0	106.8	106.8	106.9	108.3	103.4	103.4	106.1	106.9	106.9	107.0	108.6
Size D—Nonmetropolitan (less than 50,000)	M	156.5	156.9	159.8	161.5	161.3	161.4	163.1	154.4	154.9	158.3	160.0	159.9	160.0	161.7
South urban	M	161.6	161.7	164.7	166.4	166.6	166.6	167.4	159.7	159.7	163.0	164.6	164.9	164.9	165.7
Size A—More than 1,500,000	M	160.5	160.9	164.1	165.9	166.1	166.1	167.1	158.1	158.4	161.8	163.4	163.7	163.7	164.9
Size B/C—50,000 to 1,500,000[3]	M	104.1	104.1	105.9	106.9	107.1	107.1	107.6	103.7	103.6	105.7	106.7	106.9	107.0	107.4
Size D—Nonmetropolitan (less than 50,000)	M	162.1	162.0	165.1	166.8	166.7	167.0	166.9	162.6	162.3	165.8	167.6	167.6	167.9	168.0
West urban	M	168.7	168.3	171.9	173.4	173.7	173.9	174.3	164.7	164.2	167.4	169.1	169.4	169.6	169.9
Size A—More than 1,500,000	M	169.8	169.3	173.3	174.9	175.1	175.4	175.7	164.0	163.5	167.1	168.7	169.0	169.3	169.6
Size B/C—50,000 to 1,500,000[3]	M	104.8	104.5	106.2	107.1	107.2	107.3	107.6	104.7	104.3	105.9	106.8	107.1	107.1	107.4
Size classes:															
A[5]	M	150.5	150.7	154.0	155.2	155.2	155.4	156.3	149.0	149.2	152.5	153.6	153.7	154.0	155.0
B/C[3]	M	104.1	104.0	106.1	106.9	107.1	107.1	107.7	103.8	103.6	105.9	106.8	106.9	107.0	107.6
D	M	161.9	162.0	164.9	166.7	166.7	166.8	167.4	160.8	160.9	164.1	165.9	166.0	166.1	166.8
Selected local areas[6]															
Chicago–Gary–Kenosha, IL–IN–WI	M	168.2	168.9	171.3	172.0	171.7	173.5	175.8	162.3	163.0	165.6	166.4	166.1	167.9	170.2
Los Angeles–Riverside–Orange County, CA	M	166.2	165.4	169.2	170.6	170.6	171.1	170.9	159.7	158.9	162.4	163.9	163.9	164.4	164.2
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	176.1	176.8	180.4	181.4	181.2	181.3	181.9	171.5	172.1	175.8	176.6	176.6	176.9	177.4
Boston–Brockton–Nashua, MA–NH–ME–CT	1	174.2	–	–	182.7	–	181.6	–	172.6	–	–	181.1	–	180.5	–
Cleveland–Akron, OH	1	161.5	–	–	166.8	–	166.4	–	153.7	–	–	159.2	–	158.9	–
Dallas–Ft Worth, TX	1	157.2	–	–	163.1	–	163.2	–	157.0	–	–	162.9	–	163.1	–
Washington–Baltimore, DC–MD–VA–WV[7]	1	103.6	–	–	107.0	–	106.7	–	103.4	–	–	106.9	–	106.6	–
Atlanta, GA	2	–	164.8	167.4	–	169.8	–	171.1	–	161.9	164.9	–	167.2	–	168.7
Detroit–Ann Arbor–Flint, MI	2	–	163.8	167.2	–	168.1	–	170.8	–	158.3	162.0	–	162.8	–	165.6
Houston–Galveston–Brazoria, TX	2	–	148.3	152.1	–	152.7	–	154.0	–	147.1	150.5	–	151.3	–	153.0
Miami–Ft. Lauderdale, FL	2	–	161.3	165.9	–	166.9	–	168.0	–	158.9	163.5	–	164.5	–	165.7
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	–	172.1	174.7	–	175.7	–	176.4	–	171.9	174.5	–	175.7	–	176.0
San Francisco–Oakland–San Jose, CA	2	–	171.8	176.5	–	178.6	–	179.0	–	168.3	172.5	–	174.8	–	175.2
Seattle–Tacoma–Bremerton, WA	2	–	172.7	176.0	–	177.7	–	179.1	–	168.0	171.5	–	173.2	–	174.4

[1] Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:
M—Every month.
1—January, March, May, July, September, and November.
2—February, April, June, August, October, and December.

[2] Regions defined as the four Census regions.

[3] Indexes on a December 1996 = 100 base.

[4] The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.

[5] Indexes on a December 1986 = 100 base.

[6] In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the *CPI Detailed Report*: Anchorage, AK; Cincinnati–Hamilton, OH–KY–IN; Denver–Boulder–Greeley, CO; Honolulu, HI; Kansas City, MO–KS; Milwaukee–Racine, WI; Minneapolis–St. Paul, MN–WI; Pittsburgh, PA; Portland–Salem, OR–WA; St Louis, MO–IL; San Diego, CA; Tampa–St. Petersburg–Clearwater, FL.

[7] Indexes on a November 1996 = 100 base.

– Data not available.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date.

30. Annual data: Consumer Price Index, U.S. city average, all items and major groups

[1982–84 = 100]

Series	1991	1992	1993	1994	1995	1996	1997	1998	1999
Consumer Price Index for All Urban Consumers:									
All items:									
Index	136.2	140.3	144.5	148.2	152.4	156.9	160.5	163.0	166.6
Percent change	4.2	3.0	3.0	2.6	2.8	3.0	2.3	1.6	2.2
Food and beverages:									
Index	136.8	138.7	141.6	144.9	148.9	153.7	157.7	161.1	164.6
Percent change	3.6	1.4	2.1	2.3	2.8	3.2	2.6	2.2	2.2
Housing:									
Index	133.6	137.5	141.2	144.8	148.5	152.8	156.8	160.4	163.9
Percent change	4.0	2.9	2.7	2.5	2.6	2.9	2.6	2.3	2.2
Apparel:									
Index	128.7	131.9	133.7	133.4	132.0	131.7	132.9	133.0	131.3
Percent change	3.7	2.5	1.4	–.2	–1.0	–.2	.9	.1	–1.3
Transportation:									
Index	123.8	126.5	130.4	134.3	139.1	143.0	144.3	141.6	144.4
Percent change	2.7	2.2	3.1	3.0	3.6	2.8	0.9	–1.9	2.0
Medical care:									
Index	177.0	190.1	201.4	211.0	220.5	228.2	234.6	242.1	250.6
Percent change	8.7	7.4	5.9	4.8	4.5	3.5	2.8	3.2	3.5
Other goods and services:									
Index	171.6	183.3	192.9	198.5	206.9	215.4	224.8	237.7	258.3
Percent change	7.9	6.8	5.2	2.9	4.2	4.1	4.4	5.7	8.7
Consumer Price Index for Urban Wage Earners and Clerical Workers:									
All items:									
Index	134.3	138.2	142.1	145.6	149.8	154.1	157.6	159.7	163.2
Percent change	4.1	2.9	2.8	2.5	2.9	2.9	2.3	1.3	2.2

31. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		1999							2000					
	1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Finished goods	130.7	133.0	132.7	132.9	133.7	134.7	135.1	134.9	134.9	134.7	136.0	136.8	137.0	137.5	138.4
Finished consumer goods	128.9	132.0	131.7	132.1	133.2	134.6	134.5	134.3	134.3	133.9	135.7	136.7	136.9	137.6	138.8
Finished consumer foods	134.3	135.1	135.1	134.6	135.9	136.7	135.8	135.4	135.6	135.0	136.0	136.0	137.1	138.0	137.3
Finshed consumer goods excluding foods	126.4	130.5	130.0	130.8	131.9	133.5	133.7	133.6	133.6	133.3	135.4	136.8	136.6	137.2	139.2
Nondurable goods less food	122.2	127.9	127.5	128.9	130.4	132.8	131.5	131.6	131.7	131.4	134.3	136.4	136.0	136.9	139.9
Durable goods	132.9	133.0	132.3	131.7	131.6	131.2	134.9	134.6	134.4	134.1	133.9	133.8	133.9	134.0	133.6
Capital equipment	137.6	137.6	137.2	137.0	136.9	136.7	138.5	138.3	138.3	138.4	138.5	138.5	138.7	138.7	138.5
Intermediate materials, supplies, and components	123.0	123.2	123.0	123.9	124.6	125.3	125.0	125.2	125.4	125.9	126.9	127.8	128.0	128.3	129.7
Materials and components for manufacturing	126.1	124.6	124.1	124.6	125.0	125.4	125.9	125.9	125.9	126.4	127.0	127.6	128.0	128.4	128.6
Materials for food manufacturing	123.2	120.8	120.0	119.0	121.1	122.0	122.2	120.9	118.2	117.6	117.5	118.1	119.6	120.6	120.7
Materials for nondurable manufacturing	126.7	124.9	123.8	124.8	125.5	126.5	127.7	127.8	128.2	128.6	129.7	131.3	132.1	133.2	133.9
Materials for durable manufacturing	128.0	125.1	124.8	126.1	126.2	126.2	126.5	126.7	127.2	128.6	129.6	129.7	129.8	129.6	129.3
Components for manufacturing	125.9	125.7	125.7	125.6	125.6	125.7	125.7	125.7	125.8	125.9	125.9	126.0	125.9	126.0	126.1
Materials and components for construction	146.8	148.9	149.5	150.5	150.4	149.6	149.1	149.4	149.8	150.4	150.8	151.3	151.6	151.1	150.9
Processed fuels and lubricants	81.1	84.6	84.9	87.6	90.0	92.5	89.3	90.2	90.6	91.5	94.8	97.4	96.3	96.7	103.2
Containers	140.8	142.5	142.2	142.1	143.6	145.7	146.3	146.5	146.5	147.2	147.2	148.1	151.8	152.8	153.3
Supplies	134.8	134.2	133.9	133.9	134.2	134.4	134.8	135.0	135.1	135.2	135.6	136.0	136.2	136.6	137.1
Crude materials for further processing	96.8	98.2	97.4	97.9	103.1	107.3	104.0	109.2	103.5	105.8	110.3	112.9	110.6	115.4	121.9
Foodstuffs and feedstuffs	103.9	98.7	99.5	96.2	100.1	100.1	98.8	99.5	96.9	96.5	97.6	101.4	103.5	104.6	101.8
Crude nonfood materials	88.4	94.3	92.5	95.5	101.5	108.3	103.8	111.9	104.3	108.3	115.1	116.7	111.5	118.6	131.4
Special groupings:															
Finished goods, excluding foods	129.5	132.3	131.8	132.3	133.0	134.0	134.7	134.7	134.6	134.5	135.9	136.9	136.8	137.2	138.6
Finished energy goods	75.1	78.8	78.6	80.7	83.5	85.8	83.5	83.6	83.6	83.8	87.5	90.9	90.1	91.5	97.0
Finished goods less energy	141.1	143.0	142.6	142.3	142.5	143.1	144.2	144.0	144.0	143.6	144.3	144.3	144.7	145.0	144.6
Finished consumer goods less energy	142.5	145.2	144.8	144.5	144.9	145.8	146.6	146.3	146.4	145.8	146.7	146.7	147.2	147.6	147.1
Finished goods less food and energy	143.7	146.1	145.5	145.3	145.2	145.7	147.5	147.4	147.4	147.0	147.5	147.5	147.7	147.8	147.5
Finished consumer goods less food and energy	147.7	151.7	151.0	150.9	150.7	151.7	153.6	153.4	153.4	152.8	153.6	153.6	153.7	153.8	153.4
Consumer nondurable goods less food and energy	159.1	166.3	165.7	165.9	165.7	167.9	168.1	168.2	168.2	167.3	169.0	169.1	169.2	169.4	169.0
Intermediate materials less foods and feeds	123.4	123.9	123.7	124.7	125.4	126.0	125.7	126.0	126.2	126.8	127.8	128.8	128.9	129.2	130.7
Intermediate foods and feeds	116.2	111.1	110.2	109.1	110.9	111.8	112.4	111.6	109.7	109.3	110.0	111.0	111.8	113.2	113.5
Intermediate energy goods	80.8	84.6	84.6	87.2	89.6	92.1	89.0	89.9	90.3	91.2	94.5	97.1	96.0	96.5	102.9
Intermediate goods less energy	132.4	131.7	131.5	131.9	132.3	132.5	132.9	133.0	133.0	133.5	133.9	134.5	134.9	135.2	135.5
Intermediate materials less foods and energy	133.5	133.1	132.9	133.4	133.7	133.9	134.2	134.4	134.6	135.1	135.5	136.1	136.5	136.7	136.9
Crude energy materials	68.6	78.5	77.1	80.4	87.3	95.4	88.7	98.9	87.9	92.0	100.2	102.5	96.3	105.8	122.9
Crude materials less energy	113.6	107.9	107.7	105.8	109.4	110.0	109.8	110.5	109.5	110.2	111.5	114.1	115.2	115.8	113.3
Crude nonfood materials less energy	142.1	135.2	132.2	134.2	136.8	139.1	141.7	142.6	146.0	149.8	151.3	150.9	149.0	148.5	146.8

32. Producer Price Indexes for the net output of major industry groups

[December 1984 = 100, unless otherwise indicated]

SIC	Industry	Annual average		1999							2000					
		1998	1999	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
–	**Total mining industries**	70.8	78.0	76.3	78.7	84.7	91.5	87.7	95.1	86.7	89.5	95.8	98.9	94.9	100.0	113.8
10	Metal mining	73.2	70.3	67.3	68.8	69.3	70.4	76.3	73.4	72.6	73.9	75.3	73.3	73.4	71.7	73.7
12	Coal mining (12/85 = 100)	89.5	87.3	88.2	86.9	86.9	85.9	86.0	86.1	85.4	85.3	84.7	84.8	84.4	86.0	85.0
13	Oil and gas extraction (12/85 = 100)	68.3	78.5	76.2	79.6	87.6	96.9	91.2	101.6	90.4	94.2	102.6	107.0	101.8	108.3	127.1
14	Mining and quarrying of nonmetallic minerals, except fuels	132.2	134.0	134.2	134.2	134.2	134.3	134.4	134.4	134.4	135.0	135.3	135.7	136.0	137.5	136.8
–	**Total manufacturing industries**	126.2	128.3	127.8	128.3	129.0	129.7	130.2	130.3	130.5	130.8	132.2	132.9	132.8	133.4	134.0
20	Food and kindred products	126.3	126.3	126.0	125.9	126.8	127.5	127.5	127.1	126.7	126.7	127.2	127.4	128.2	129.1	129.1
21	Tobacco manufactures	243.1	325.7	316.2	316.1	316.5	344.5	344.4	344.5	345.0	329.4	348.6	347.3	347.2	347.1	342.2
22	Textile mill products	118.6	116.3	116.3	115.9	116.0	115.9	116.1	115.9	116.1	116.2	116.4	116.5	116.1	116.3	116.2
23	Apparel and other finished products made from fabrics and similar materials	124.8	125.3	125.1	125.1	125.5	125.6	125.6	125.4	125.3	125.2	125.2	125.6	125.6	125.6	125.5
24	Lumber and wood products, except furniture	157.0	161.8	165.2	168.5	166.9	163.1	160.0	159.6	160.6	161.4	161.6	162.1	161.8	159.0	158.4
25	Furniture and fixtures	139.7	141.3	141.1	141.3	141.6	141.8	142.0	142.0	142.1	142.4	142.5	143.0	143.0	143.3	143.5
26	Paper and allied products	136.2	136.4	135.8	136.3	137.3	138.7	139.9	140.2	140.4	141.0	141.5	143.2	145.8	146.9	147.2
27	Printing, publishing, and allied industries	174.0	177.6	177.2	177.4	177.7	178.1	178.6	179.1	179.2	180.4	180.8	181.1	181.3	181.7	182.9
28	Chemicals and allied products	148.7	149.7	149.0	149.9	150.0	151.0	152.8	153.0	152.9	153.6	154.5	155.2	155.5	156.9	157.1
29	Petroleum refining and related products	66.3	76.8	74.2	79.6	85.3	90.2	87.0	89.5	91.8	94.0	104.1	111.0	107.8	111.4	118.0
30	Rubber and miscellaneous plastics products	122.1	122.2	121.9	122.1	122.5	122.8	122.9	123.3	123.4	123.5	123.5	123.5	124.1	123.3	123.9
31	Leather and leather products	137.1	136.5	136.5	136.7	136.7	136.9	137.0	137.0	137.0	137.5	137.5	137.4	137.4	137.5	137.4
32	Stone, clay, glass, and concrete products	129.3	132.6	132.7	132.7	133.1	133.2	133.6	133.7	133.5	134.4	134.6	134.7	134.7	134.8	134.9
33	Primary metal industries	120.9	115.8	115.0	115.4	115.7	116.4	117.1	117.1	117.4	118.6	119.5	120.0	120.5	120.5	120.1
34	Fabricated metal products, except machinery and transportation transportation equipment	128.7	129.1	129.1	129.1	129.1	129.2	129.4	129.6	129.7	129.9	130.0	130.3	130.4	130.3	130.3
35	Machinery, except electrical	117.7	117.3	117.5	117.3	117.2	117.1	117.1	117.1	117.0	117.1	117.3	117.4	117.4	117.5	117.5
36	Electrical and electronic machinery, equipment, and supplies	110.4	109.5	109.5	109.5	109.5	109.2	109.1	109.1	108.9	108.7	108.6	108.6	108.7	108.6	108.6
37	Transportation	133.6	134.5	133.6	133.0	132.9	132.6	136.7	136.2	136.2	136.3	136.5	136.4	136.3	136.1	136.0
38	Measuring and controlling instruments; photographic, medical, and optical goods; watches and clocks	126.0	125.7	125.3	125.1	125.0	124.9	125.2	125.3	125.6	126.0	126.2	126.0	126.1	126.3	126.5
39	Miscellaneous manufacturing industries (12/85 = 100)	129.7	130.3	130.5	130.5	130.1	130.0	130.4	130.2	130.5	130.7	131.1	130.8	131.1	131.3	131.3
	Service industries:															
42	Motor freight transportation and warehousing (06/93 = 100)	111.6	114.8	114.6	114.8	115.1	115.8	115.5	115.5	115.8	116.5	117.0	118.1	118.2	118.8	119.4
43	U.S. Postal Service (06/89 = 100)	132.3	135.3	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2
44	Water transportation (12/92 = 100)	105.6	113.0	116.8	117.4	117.2	117.3	116.7	116.7	116.1	116.4	117.0	117.8	118.5	119.8	123.2
45	Transportation by air (12/92 = 100)	124.5	130.8	130.9	131.4	131.7	131.8	133.1	133.4	134.2	141.0	141.6	144.3	142.5	149.6	147.5
46	Pipelines, except natural gas (12/92 = 100)	99.2	98.3	98.6	98.2	98.2	98.3	98.3	98.2	98.2	102.1	101.9	101.9	101.9	101.9	102.0

33. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

Index	1991	1992	1993	1994	1995	1996	1997	1998	1999
Finished goods									
Total	121.7	123.2	124.7	125.5	127.9	131.3	131.8	130.7	133.0
Foods	124.1	123.3	125.7	126.8	129.0	133.6	134.5	134.3	135.1
Energy	78.1	77.8	78.0	77.0	78.1	83.2	83.4	75.1	78.8
Other	131.1	134.2	135.8	137.1	140.0	142.0	142.4	143.7	146.1
Intermediate materials, supplies, and components									
Total	114.4	114.7	116.2	118.5	124.9	125.7	125.6	123.0	123.2
Foods	115.3	113.9	115.6	118.5	119.5	125.3	123.2	123.2	120.8
Energy	85.1	84.3	84.6	83.0	84.1	89.8	89.0	80.8	84.3
Other	121.4	122.0	123.8	127.1	135.2	134.0	134.2	133.5	133.1
Crude materials for further processing									
Total	101.2	100.4	102.4	101.8	102.7	113.8	111.1	96.8	98.2
Foods	105.5	105.1	108.4	106.5	105.8	121.5	112.2	103.9	98.7
Energy	80.4	78.8	76.7	72.1	69.4	85.0	87.3	68.6	78.5
Other	97.5	94.2	94.1	97.0	105.8	105.7	103.5	84.5	91.1

34. U.S. export price indexes by Standard International Trade Classification

[1995 = 100, unless otherwise indicated]

SITC Rev. 3	Industry	1999							2000					
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
0	**Food and live animals**	89.2	87.4	87.6	86.6	86.4	86.3	85.6	86.3	86.9	86.8	87.5	88.3	87.4
01	Meat and meat preparations	91.5	94.2	97.3	97.5	97.4	97.7	100.9	100.1	98.0	99.4	102.2	105.1	109.5
04	Cereals and cereal preparations	75.9	70.9	73.3	72.7	69.5	70.1	68.5	71.0	74.1	74.4	74.0	75.0	71.6
05	Vegetables, fruit, and nuts, prepared fresh or dry	98.5	99.8	97.8	94.3	96.6	94.3	91.2	90.9	89.0	88.6	90.6	90.1	87.8
2	**Crude materials, inedible, except fuels**	74.9	74.7	76.5	77.7	78.1	77.8	78.9	80.0	82.2	83.2	84.2	85.2	84.4
21	Hides, skins, and furskins, raw	79.0	80.3	83.4	86.5	88.6	87.8	90.5	91.1	89.5	87.7	85.5	86.5	86.7
22	Oilseeds and oleaginous fruits	79.2	72.8	80.1	85.0	82.3	78.1	79.6	80.5	84.8	86.0	88.3	89.1	86.3
24	Cork and wood	82.0	82.9	83.0	82.8	83.5	83.8	85.0	86.4	86.5	87.2	87.4	86.7	86.7
25	Pulp and waste paper	66.0	71.5	73.5	75.2	77.1	78.7	80.9	84.3	88.3	90.0	93.8	99.0	97.6
26	Textile fibers and their waste	68.6	65.2	65.1	64.4	64.5	63.4	62.5	61.2	65.7	68.6	68.9	69.0	69.6
27	Crude fertilizers and crude minerals	93.5	93.6	93.0	93.3	93.1	93.8	94.1	94.3	94.0	93.5	93.0	93.0	93.3
28	Metalliferous ores and metal scrap	70.7	72.3	73.0	73.5	75.1	77.3	78.4	80.0	80.7	80.9	80.4	79.6	78.2
3	**Mineral fuels, lubricants, and related products**	102.0	109.0	113.8	115.3	119.5	121.4	126.6	129.5	138.5	152.1	137.2	142.3	145.0
32	Coal, coke, and briquettes	98.3	98.2	98.3	97.6	97.6	97.6	97.5	96.1	96.1	96.1	94.7	94.5	93.8
33	Petroleum, petroleum products, and related materials	107.6	119.8	126.4	128.6	131.3	133.4	140.1	143.6	159.6	179.2	152.0	163.1	168.3
4	**Animal and vegetable oils, fats, and waxes**	76.6	76.8	77.1	78.8	81.9	79.0	78.0	75.8	74.3	70.8	71.6	70.1	67.1
5	**Chemicals and related products, n.e.s.**	91.2	91.6	91.8	92.3	93.3	93.3	93.6	93.8	94.2	94.4	95.8	96.0	95.7
54	Medicinal and pharmaceutical products	100.6	100.3	99.9	99.8	99.8	99.8	100.3	100.2	100.4	100.2	99.9	100.0	99.7
55	Essential oils; polishing and cleaning preparations	101.9	101.9	101.8	102.1	102.3	103.5	103.4	103.4	103.3	103.0	103.2	103.1	102.9
57	Plastics in primary forms (12/92 = 100)	88.4	89.7	90.6	92.1	94.4	94.9	95.0	94.8	94.8	95.5	97.7	98.4	98.1
58	Plastics in nonprimary forms (12/92 = 100)	97.2	97.4	97.4	97.6	97.9	97.8	98.0	97.8	98.6	100.1	100.2	99.8	99.3
59	Chemical materials and products, n.e.s.	99.6	99.4	99.3	99.2	98.9	98.8	99.1	99.2	99.9	99.6	99.4	99.3	99.1
6	**Manufactured goods classified chiefly by materials**	96.8	97.1	97.3	97.5	97.8	98.0	98.3	98.3	99.0	99.7	99.9	100.0	100.3
62	Rubber manufactures, n.e.s.	105.5	105.6	105.8	106.9	108.2	108.2	108.5	104.7	103.7	103.6	103.7	103.9	104.3
64	Paper, paperboard, and articles of paper, pulp, and paperboard	83.4	84.4	85.4	86.3	87.2	87.6	87.2	87.6	87.8	88.4	89.1	90.5	89.7
66	Nonmetallic mineral manufactures, n.e.s.	106.3	106.3	106.3	106.1	106.0	106.0	105.8	105.8	106.0	106.2	106.4	106.4	106.5
68	Nonferrous metals	85.0	85.3	87.0	88.0	90.2	90.7	92.3	93.4	98.8	101.9	100.3	98.1	100.1
7	**Machinery and transport equipment**	97.6	97.3	97.3	97.2	97.4	97.5	97.2	97.4	97.3	97.3	97.3	97.4	97.3
71	Power generating machinery and equipment	109.6	110.1	110.1	110.1	110.2	111.0	111.0	111.8	111.8	111.8	111.9	112.0	112.0
72	Machinery specialized for particular industries	106.1	105.8	105.8	105.9	106.0	106.1	104.7	106.2	106.3	106.1	106.2	106.2	106.5
74	General industrial machines and parts, n.e.s., and machine parts	107.3	107.5	107.5	107.6	107.7	107.7	107.9	107.5	107.6	108.0	108.2	108.2	108.3
75	Computer equipment and office machines	71.6	71.0	71.0	70.2	70.5	70.4	70.2	70.1	68.7	68.7	68.5	68.5	68.3
76	Telecommunications and sound recording and reproducing apparatus and equipment	96.9	97.0	96.9	96.9	96.6	96.6	96.7	96.4	97.0	96.6	96.4	97.0	96.9
77	Electrical machinery and equipment	88.6	87.7	87.5	87.6	87.4	87.3	86.7	86.4	86.6	86.3	86.4	86.3	85.7
78	Road vehicles	102.5	102.4	102.3	102.4	103.1	103.1	103.1	103.5	103.6	104.0	103.9	103.9	103.9
87	**Professional, scientific, and controlling instruments and apparatus**	105.2	105.4	105.4	105.4	105.5	105.6	105.3	105.2	105.4	105.7	105.7	105.7	105.7

35. U.S. import price indexes by Standard International Trade Classification

[1995 = 100, unless otherwise indicated]

SITC Rev. 3	Industry	1999							2000					
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
0	**Food and live animals**	93.3	92.6	92.0	91.5	91.0	92.4	94.7	93.7	93.6	93.1	94.0	92.3	91.6
01	Meat and meat preparations	94.5	94.3	96.7	99.4	98.4	97.7	98.4	97.8	98.2	99.1	100.2	100.2	99.1
03	Fish and crustaceans, mollusks, and other aquatic invertebrates	104.3	104.2	103.8	103.1	105.0	107.5	106.8	106.8	107.9	108.0	111.0	109.6	109.3
05	Vegetables, fruit, and nuts, prepared fresh or dry	103.2	103.5	102.6	101.6	96.5	97.2	103.6	102.0	102.1	101.2	100.7	96.8	96.6
07	Coffee, tea, cocoa, spices, and manufactures thereof	69.4	64.3	63.2	61.4	62.0	66.0	70.6	67.2	64.7	61.0	61.1	59.8	59.5
1	**Beverages and tobacco**	110.4	110.6	111.2	112.2	111.5	111.5	112.0	111.2	111.4	111.7	111.9	112.4	112.9
11	Beverages	107.2	107.6	107.7	109.1	108.5	108.5	108.7	107.9	108.2	108.5	108.7	109.4	110.0
2	**Crude materials, inedible, except fuels**	90.3	93.1	92.7	91.7	90.8	90.3	92.2	93.6	94.7	94.3	93.8	91.9	90.5
24	Cork and wood	122.3	131.9	128.9	121.7	116.7	114.9	118.7	117.7	117.0	118.6	117.6	112.9	110.1
25	Pulp and waste paper	60.6	61.4	61.1	66.0	63.9	66.8	68.2	70.5	72.0	72.4	75.1	77.0	80.1
28	Metalliferous ores and metal scrap	91.9	91.9	93.8	94.3	98.4	98.0	99.0	101.4	105.7	104.0	101.7	99.6	100.6
29	Crude animal and vegetable materials, n.e.s.	101.7	102.8	105.0	111.1	112.1	106.5	111.9	121.1	124.3	111.9	110.1	106.7	92.7
3	**Mineral fuels, lubricants, and related products**	92.7	105.3	117.1	126.5	128.0	134.7	141.2	145.2	165.7	165.4	148.5	154.1	170.9
33	Petroleum, petroleum products, and related materials	91.3	103.8	115.9	125.7	127.4	132.6	141.4	146.1	167.9	166.6	147.1	154.1	169.8
34	Gas, natural and manufactured	106.5	123.1	134.1	142.2	141.1	161.5	150.2	147.8	161.4	170.5	171.5	167.5	195.5
5	**Chemicals and related products, n.e.s.**	90.6	90.6	90.4	91.3	91.8	92.1	92.0	92.2	92.7	92.8	93.4	94.3	94.3
52	Inorganic chemicals	86.7	86.4	86.2	86.6	87.2	87.7	88.0	88.3	89.0	88.8	89.8	90.7	91.5
53	Dying, tanning, and coloring materials	91.9	90.6	90.5	90.2	90.6	91.4	89.7	88.9	89.3	88.4	88.0	87.4	86.1
54	Medicinal and pharmaceutical products	96.2	96.2	96.3	97.0	97.4	97.8	97.3	98.2	98.2	97.3	97.3	97.3	96.8
55	Essential oils; polishing and cleaning preparations	92.4	91.7	91.8	92.3	91.8	92.3	90.2	89.6	89.6	89.7	89.4	89.9	89.8
57	Plastics in primary forms (12/92 = 100)	93.6	93.7	93.1	93.8	93.8	93.9	94.0	93.7	93.0	93.9	93.9	94.0	94.3
58	Plastics in nonprimary forms (12/92 = 100)	75.6	75.8	76.1	77.9	78.9	79.4	79.7	79.3	79.0	80.4	80.3	80.8	80.8
59	Chemical materials and products, n.e.s.	97.4	98.0	98.1	98.1	98.6	98.4	99.5	100.0	101.6	100.6	100.0	100.9	99.7
6	**Manufactured goods classified chiefly by materials**	92.0	91.9	92.4	92.6	93.3	93.9	93.9	94.5	95.5	98.0	97.5	97.1	97.6
62	Rubber manufactures, n.e.s.	94.3	94.4	94.5	95.0	94.9	94.4	94.4	92.7	92.8	92.3	92.4	92.5	92.2
64	Paper, paperboard, and articles of paper, pulp, and paperboard	83.7	83.6	83.5	83.7	84.4	87.4	86.2	86.6	86.9	87.1	88.8	89.7	89.2
66	Nonmetallic mineral manufactures, n.e.s.	100.9	100.8	100.9	101.1	101.2	101.6	101.2	100.8	101.2	100.8	100.9	100.7	100.5
68	Nonferrous metals	87.7	87.6	89.9	91.1	94.8	95.4	95.6	98.9	104.4	115.1	110.3	106.9	110.7
69	Manufactures of metals, n.e.s.	96.1	95.8	95.6	95.8	95.6	95.9	95.9	95.7	96.1	96.1	95.9	95.9	95.7
7	**Machinery and transport equipment**	90.3	89.9	89.9	89.9	89.9	89.8	89.7	89.8	89.8	89.6	89.7	89.7	89.6
72	Machinery specialized for particular industries	97.6	97.3	97.2	97.6	97.8	98.2	97.8	97.7	97.9	97.3	97.1	97.0	95.9
74	General industrial machines and parts, n.e.s., and machine parts	97.6	97.3	97.3	97.4	97.3	97.3	97.0	97.0	96.7	97.0	96.9	96.7	96.2
75	Computer equipment and office machines	63.1	62.0	61.8	61.6	61.4	61.4	61.7	61.5	61.4	61.0	60.5	60.2	60.0
76	Telecommunications and sound recording and reproducing apparatus and equipment	87.6	87.3	87.0	87.1	86.0	85.9	85.6	85.2	85.2	84.9	84.5	84.5	84.4
77	Electrical machinery and equipment	82.7	81.9	82.1	82.5	82.6	82.2	82.1	82.4	82.2	82.2	83.0	83.4	83.2
78	Road vehicles	102.3	102.4	102.4	102.2	102.4	102.4	102.3	102.4	102.6	102.6	102.7	102.7	102.8
85	Footwear	100.7	100.7	100.6	100.8	100.8	100.8	100.8	100.8	100.9	100.7	100.5	100.7	100.3
88	Photographic apparatus, equipment, and supplies, and optical goods, n.e.s.	91.3	91.2	91.1	91.4	92.2	92.5	92.5	92.2	91.7	91.8	91.8	91.9	91.6

36. U.S. export price indexes by end-use category

[1995 = 100]

Category	1999							2000					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
ALL COMMODITIES	94.5	94.4	94.7	94.8	95.1	95.3	95.2	95.4	95.8	96.3	96.2	96.5	96.3
Foods, feeds, and beverages	88.9	86.7	87.9	87.6	87.4	86.7	86.0	86.3	87.2	87.1	87.8	88.3	87.0
Agricultural foods, feeds, and beverages	86.8	85.0	86.9	86.7	86.4	85.6	84.9	85.4	86.0	86.2	87.1	87.7	86.2
Nonagricultural (fish, beverages) food products	113.1	106.8	99.5	98.2	99.7	99.2	99.5	98.3	100.9	97.8	97.0	96.6	97.1
Industrial supplies and materials	87.5	88.3	89.0	89.5	90.4	91.1	91.7	92.1	93.6	95.2	94.6	95.3	95.3
Agricultural industrial supplies and materials	78.4	76.2	76.3	76.6	77.5	76.6	76.7	75.2	76.9	77.7	78.2	78.2	78.2
Fuels and lubricants	99.8	106.1	110.5	111.8	114.4	115.9	120.4	122.7	131.3	143.6	127.8	133.0	135.6
Nonagricultural supplies and materials, excluding fuel and building materials	86.0	86.6	87.0	87.5	88.3	89.1	89.3	89.7	90.4	91.0	91.9	92.3	92.0
Selected building materials	87.8	88.0	88.4	87.4	87.8	87.7	88.6	89.2	89.5	90.1	90.4	90.0	89.9
Capital goods	96.5	96.2	96.2	96.1	96.2	96.3	96.0	96.1	96.0	96.0	96.1	96.1	96.0
Electric and electrical generating equipment	99.0	98.2	98.0	98.3	98.3	98.4	98.5	98.3	98.8	98.8	98.7	98.9	99.0
Nonelectrical machinery	92.9	92.6	92.6	92.4	92.4	92.5	92.1	92.1	91.9	91.8	91.9	91.9	91.7
Automotive vehicles, parts, and engines	103.2	103.2	103.2	103.3	104.0	103.9	103.8	103.9	103.8	104.2	104.2	104.2	104.1
Consumer goods, excluding automotive	102.0	101.9	102.0	101.9	102.2	102.2	102.4	102.4	102.5	102.3	102.4	102.4	102.2
Nondurables, manufactured	102.1	102.0	102.0	102.1	102.4	102.5	102.9	102.8	102.6	102.4	102.3	102.4	102.1
Durables, manufactured	100.5	100.6	100.8	100.7	100.8	100.9	100.8	101.0	101.4	101.0	101.3	101.3	101.3
Agricultural commodities	85.0	83.1	84.7	84.6	84.5	83.7	83.1	83.2	84.0	84.4	85.1	85.6	84.4
Nonagricultural commodities	95.6	95.7	95.8	95.9	96.3	96.6	96.6	96.8	97.2	97.6	97.4	97.7	97.6

37. U.S. import price indexes by end-use category

[1995 = 100]

Category	1999							2000					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
ALL COMMODITIES	92.4	93.3	94.3	95.2	95.4	96.2	96.8	97.2	99.2	99.3	97.9	98.3	99.5
Foods, feeds, and beverages	93.7	92.8	92.5	92.3	91.6	93.0	94.8	93.6	93.3	92.5	93.3	91.9	91.3
Agricultural foods, feeds, and beverages	89.3	88.0	87.7	87.6	86.1	87.2	89.8	88.4	87.6	86.6	86.7	85.2	84.4
Nonagricultural (fish, beverages) food products	105.2	105.4	105.0	104.9	106.3	108.2	107.7	107.2	108.1	108.3	110.8	109.8	109.8
Industrial supplies and materials	91.8	96.1	99.9	103.1	104.3	106.9	109.4	111.0	118.6	119.8	114.3	115.9	121.5
Fuels and lubricants	93.2	105.4	116.7	126.0	128.1	134.3	140.7	144.2	164.7	163.7	147.7	153.1	169.5
Petroleum and petroleum products	91.2	103.5	115.6	125.2	127.3	132.5	140.9	145.8	167.5	166.2	147.4	153.8	169.2
Paper and paper base stocks	77.0	77.0	76.9	78.4	78.5	81.8	81.2	82.1	82.8	83.1	85.6	86.9	87.2
Materials associated with nondurable supplies and materials	87.4	87.0	86.9	87.7	88.3	88.8	89.1	89.2	89.7	90.4	91.2	92.1	91.8
Selected building materials	114.2	120.6	118.9	113.4	110.0	108.3	111.1	110.5	110.1	112.1	111.9	109.1	105.0
Unfinished metals associated with durable goods	88.3	87.7	89.0	89.7	93.0	94.4	94.8	97.4	100.3	107.1	104.3	102.0	105.0
Nonmetals associated with durable goods	87.0	86.7	86.7	87.3	87.5	87.5	87.4	87.2	88.0	87.6	87.8	88.3	87.5
Capital goods	82.6	81.9	81.9	82.0	81.9	81.8	81.7	81.7	81.6	81.3	81.4	81.2	80.9
Electric and electrical generating equipment	91.5	91.1	91.2	91.6	91.7	91.8	91.1	91.8	91.8	92.1	93.9	94.2	94.3
Nonelectrical machinery	79.5	78.7	78.7	78.8	78.6	78.5	78.4	78.3	78.2	77.9	77.7	77.5	77.1
Automotive vehicles, parts, and engines	101.7	101.8	101.9	101.9	102.0	102.0	102.0	102.1	102.2	102.2	102.3	102.6	102.7
Consumer goods, excluding automotive	97.5	97.4	97.4	97.7	97.5	97.6	97.5	97.5	97.4	97.1	97.1	96.9	96.4
Nondurables, manufactured	100.4	100.2	100.3	100.8	100.5	100.7	100.6	100.4	100.4	100.3	100.3	100.1	99.5
Durables, manufactured	94.4	94.3	94.1	94.2	94.1	94.2	94.1	94.1	93.8	93.5	93.4	93.3	93.0
Nonmanufactured consumer goods	98.0	98.3	99.1	99.9	100.0	98.8	99.8	101.5	102.0	100.1	100.3	99.7	98.0

38. U.S. international price indexes for selected categories of services

[1990 = 100, unless otherwise indicated]

Category	1998		1999				2000	
	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Air freight (inbound) (9/90 = 100)	81.8	87.4	88.0	86.2	87.9	90.7	88.9	88.4
Air freight (outbound) (9/92 = 100)	95.8	95.2	92.7	92.8	92.7	91.7	91.7	92.8
Air passenger fares (U.S. carriers)	107.3	103.1	104.5	112.3	114.2	106.8	107.3	113.4
Air passenger fares (foreign carriers)	104.0	101.1	98.9	106.3	108.6	102.2	102.6	107.9
Ocean liner freight (inbound)	105.0	104.2	102.6	133.7	148.0	139.4	136.3	142.1

39. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

[1992 = 100]

Item	Quarterly indexes												
	1997			1998				1999				2000	
	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Business													
Output per hour of all persons	107.3	108.3	108.5	109.7	110.0	110.6	111.6	112.6	112.8	114.2	116.3	116.7	118.5
Compensation per hour	112.3	113.5	115.3	117.1	118.5	120.0	121.4	123.0	124.5	126.1	127.3	128.4	130.4
Real compensation per hour	99.8	100.4	101.5	102.9	103.8	104.7	105.5	106.4	106.9	107.6	107.8	107.7	108.4
Unit labor costs	104.7	104.8	106.3	106.7	107.7	108.5	108.8	109.3	110.4	110.5	109.5	110.0	110.0
Unit nonlabor payments	118.0	118.5	116.8	116.4	115.1	114.6	114.6	115.1	114.1	114.3	116.8	118.2	120.0
Implicit price deflator	109.6	109.9	110.2	110.3	110.5	110.7	110.9	111.4	111.8	111.9	112.2	113.0	113.7
Nonfarm business													
Output per hour of all persons	107.1	108.0	108.1	109.3	109.8	110.3	111.2	112.0	112.1	113.6	115.8	116.3	117.9
Compensation per hour	112.0	113.0	114.7	116.4	117.9	119.4	120.8	122.1	123.6	125.2	126.5	127.8	129.4
Real compensation per hour	99.5	100.0	101.0	102.3	103.2	104.2	104.9	105.7	106.1	106.8	107.2	107.2	107.6
Unit labor costs	104.5	104.7	106.1	106.5	107.5	108.3	108.5	109.0	110.2	110.3	109.3	109.8	109.8
Unit nonlabor payments	118.8	119.5	117.8	117.4	116.3	115.8	115.8	116.7	115.7	116.1	118.6	120.1	121.8
Implicit price deflator	109.7	110.1	110.4	110.5	110.7	111.0	111.2	111.8	112.2	112.4	112.7	113.6	114.2
Nonfinancial corporations													
Output per hour of all employees	109.3	110.8	111.6	112.3	113.4	114.9	115.8	117.1	118.2	119.7	121.5	122.3	–
Compensation per hour	111.1	112.1	113.7	115.2	116.6	118.0	119.3	120.9	122.4	124.0	125.3	126.1	–
Real compensation per hour	98.7	99.2	100.1	101.2	102.1	103.0	103.7	104.6	105.1	105.8	106.1	105.8	–
Total unit costs	101.6	101.1	101.5	102.0	102.3	102.1	102.6	102.5	103.0	103.2	103.0	103.1	–
Unit labor costs	101.6	101.2	101.9	102.6	102.8	102.7	103.0	103.2	103.5	103.6	103.1	103.1	–
Unit nonlabor costs	101.4	100.8	100.4	100.5	100.9	100.2	101.6	100.7	101.4	102.1	102.5	103.3	–
Unit profits	155.3	160.3	156.5	150.4	147.2	151.4	144.5	149.7	147.5	143.3	145.7	150.9	–
Unit nonlabor payments	115.1	116.0	114.7	113.2	112.7	113.3	112.5	113.2	113.2	112.6	113.5	115.4	–
Implicit price deflator	106.1	106.1	106.1	106.1	106.1	106.2	106.2	106.5	106.7	106.6	106.6	107.2	–
Manufacturing													
Output per hour of all persons	116.3	118.7	120.1	121.3	122.7	125.1	126.8	128.9	130.4	131.9	135.1	137.7	139.4
Compensation per hour	110.5	111.5	113.3	115.2	116.6	118.1	119.4	120.7	122.4	124.1	125.5	127.0	128.3
Real compensation per hour	98.1	98.6	99.8	101.2	102.1	103.0	103.7	104.4	105.1	105.9	106.4	106.5	106.8
Unit labor costs	95.0	93.9	94.4	95.0	95.1	94.4	94.1	93.6	93.8	94.1	92.9	92.2	92.0

– Data not available.

40. Annual indexes of multifactor productivity and related measures, selected years

[1992 = 100]

Item	1960	1970	1980	1989	1990	1991	1993	1994	1995	1996	1997
Private business											
Productivity:											
Output per hour of all persons	50.8	70.1	83.8	95.5	96.1	96.7	100.1	100.6	101.0	103.7	105.2
Output per unit of capital services	117.3	117.1	107.3	103.8	102.1	98.6	100.7	102.3	101.9	102.3	102.6
Multifactor productivity	70.7	86.5	95.3	100.0	99.6	98.1	100.1	100.6	100.7	102.4	103.1
Output	34.0	51.6	72.6	97.8	98.6	96.9	102.7	107.0	110.0	114.7	120.1
Inputs:											
Labor input	66.9	73.7	86.6	102.4	102.6	100.2	102.7	106.4	108.9	110.6	114.1
Capital services	29.0	44.1	67.7	94.2	96.5	98.3	102.0	104.6	108.0	112.2	117.1
Combined units of labor and capital input	48.1	59.7	76.2	97.8	99.0	98.7	102.6	106.3	109.3	112.1	116.5
Capital per hour of all persons	43.3	59.9	78.1	92.0	94.1	98.1	99.4	98.3	99.2	101.4	102.6
Private nonfarm business											
Productivity:											
Output per hour of all persons	54.3	72.2	85.6	95.9	96.3	96.9	100.1	100.6	101.2	103.7	104.9
Output per unit of capital services	126.1	124.1	111.4	104.6	102.6	98.8	100.8	102.1	101.8	102.1	102.1
Multifactor productivity	74.9	89.4	97.6	100.5	99.8	98.4	100.1	100.5	100.8	102.3	102.7
Output	33.7	51.8	73.1	98.1	98.8	97.0	103.0	107.1	110.4	115.0	120.2
Inputs:											
Labor input	62.1	71.7	85.4	102.4	102.6	100.1	102.9	106.5	109.0	110.9	114.6
Capital services	26.7	41.8	65.6	93.9	96.3	98.2	102.2	104.8	108.4	112.6	117.7
Combined units of labor and capital input	45.0	58.0	74.9	97.7	99.0	98.6	102.9	106.5	109.5	112.4	117.0
Capital per hour of all persons	43.0	58.2	76.8	91.7	93.8	98.1	99.3	98.5	99.4	101.6	102.8
Manufacturing											
Productivity:											
Output per hour of all persons	42.1	54.5	70.4	90.7	93.0	95.1	102.2	105.3	109.4	113.8	–
Output per unit of capital services	125.6	116.3	101.5	103.5	101.3	97.3	101.8	105.2	106.8	107.0	–
Multifactor productivity	72.9	84.2	87.3	100.4	99.8	98.6	101.2	104.4	108.4	110.7	–
Output	38.7	56.8	75.7	97.1	97.5	95.5	103.6	109.1	113.8	118.0	–
Inputs:											
Hours of all persons	92.0	104.2	107.5	107.1	104.8	100.4	101.4	103.6	104.0	103.7	–
Capital services	30.9	48.8	74.6	93.8	96.3	98.2	101.7	103.6	106.6	110.3	–
Energy	51.5	85.4	92.5	96.8	99.9	100.1	103.7	107.3	109.5	107.0	–
Nonenergy materials	39.1	46.0	74.5	88.3	91.3	93.1	103.0	104.4	101.4	105.4	–
Purchased business services	27.3	47.4	71.9	88.9	91.8	91.9	104.3	107.8	111.0	111.6	–
Combined units of all factor inputs	53.1	67.4	86.7	96.7	97.7	96.9	102.3	104.5	105.0	106.6	–

– Data not available.

41. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[1992 = 100]

Item	1960	1970	1980	1989	1990	1991	1993	1994	1995	1996	1997	1998	1999
Business													
Output per hour of all persons	48.8	67.0	80.4	93.9	95.2	96.3	100.5	101.9	102.6	105.4	107.6	110.5	114.0
Compensation per hour	13.7	23.5	54.2	85.8	90.7	95.0	102.5	104.5	106.7	110.1	113.3	119.3	125.2
Real compensation per hour	60.0	78.9	89.5	95.9	96.5	97.5	99.9	99.7	99.3	99.7	100.4	104.3	107.3
Unit labor costs	28.0	35.1	67.4	91.3	95.3	98.7	101.9	102.6	104.1	104.5	105.3	107.9	109.9
Unit nonlabor payments	25.2	31.6	61.5	91.8	93.9	97.0	102.5	106.4	109.4	113.3	117.1	115.2	115.1
Implicit price deflator	27.0	33.9	65.2	91.5	94.8	98.1	102.2	104.0	106.0	107.7	109.7	110.6	111.8
Nonfarm business													
Output per hour of all persons	51.9	68.9	82.0	94.2	95.3	96.4	100.5	101.8	102.8	105.4	107.3	110.2	113.4
Compensation per hour	14.3	23.7	54.6	85.8	90.5	95.0	102.2	104.3	106.6	109.8	112.9	118.6	124.4
Real compensation per hour	62.8	79.5	90.0	95.9	96.3	97.5	99.6	99.5	99.2	99.5	100.0	103.8	106.5
Unit labor costs	27.5	34.4	66.5	91.1	95.0	98.5	101.7	102.5	103.7	104.2	105.1	107.7	109.7
Unit nonlabor payments	24.6	31.3	60.5	91.3	93.6	97.1	103.0	106.9	110.4	113.5	118.0	116.3	116.8
Implicit price deflator	26.5	33.3	64.3	91.2	94.5	98.0	102.2	104.1	106.1	107.6	109.8	110.8	112.3
Nonfinancial corporations													
Output per hour of all employees	55.4	70.4	81.1	94.6	95.4	97.6	100.8	103.2	104.3	107.6	110.2	114.2	119.2
Compensation per hour	15.6	25.3	56.4	86.2	90.8	95.2	102.1	104.3	106.2	109.1	112.0	117.4	123.2
Real compensation per hour	68.3	84.7	93.1	96.3	96.6	97.8	99.6	99.5	98.9	98.8	99.3	102.7	105.5
Total unit costs	26.8	34.8	68.4	92.0	95.9	98.8	101.0	101.1	102.0	101.2	101.4	102.2	102.9
Unit labor costs	28.1	35.9	69.6	91.1	95.2	97.5	101.3	101.0	101.9	101.4	101.6	102.8	103.4
Unit nonlabor costs	23.3	31.9	65.1	94.6	98.0	102.1	100.2	101.3	102.2	100.6	100.8	100.8	101.7
Unit profits	50.2	44.4	68.8	97.3	94.3	93.0	113.2	131.7	139.0	152.2	156.7	148.3	146.5
Unit nonlabor payments	30.2	35.1	66.0	95.3	97.1	99.7	103.5	109.0	111.6	113.8	115.0	112.9	113.1
Implicit price deflator	28.8	35.6	68.4	92.5	95.8	98.3	102.1	103.7	105.1	105.5	106.1	106.1	106.6
Manufacturing													
Output per hour of all persons	41.9	54.3	70.3	90.5	92.9	95.0	102.0	105.2	109.3	113.1	117.6	123.9	131.6
Compensation per hour	14.9	23.7	55.6	86.6	90.8	95.6	102.7	105.6	107.9	109.3	111.4	117.3	123.2
Real compensation per hour	65.2	79.5	91.7	96.8	96.6	98.1	100.2	100.8	100.4	99.0	98.8	102.6	105.5
Unit labor costs	35.5	43.7	79.1	95.8	97.7	100.6	100.7	100.4	98.7	96.6	94.8	94.6	93.6
Unit nonlabor payments	26.8	29.4	80.2	95.4	99.6	98.9	101.0	102.9	107.2	110.1	109.7	104.6	–
Implicit price deflator	30.2	34.9	79.8	95.5	98.9	99.6	100.9	101.9	103.9	104.9	103.9	100.7	–

– Data not available.

42. Annual indexes of output per hour for selected 3-digit SIC industries

[1987 = 100]

Industry	SIC	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Mining												
Copper ores	102	109.2	106.6	102.7	100.5	115.2	118.1	126.0	117.2	116.5	118.9	117.5
Gold and silver ores	104	101.5	113.3	122.3	127.4	141.6	159.8	160.8	144.2	138.3	159.0	186.3
Bituminous coal and lignite mining	122	111.7	117.3	118.7	122.4	133.0	141.2	148.1	155.9	168.0	176.6	187.3
Crude petroleum and natural gas	131	101.0	98.0	97.0	97.9	102.1	105.9	112.4	119.4	123.9	125.2	128.7
Crushed and broken stone	142	101.3	98.7	102.2	99.8	105.0	103.6	108.7	105.4	107.2	114.0	111.9
Manufacturing												
Meat products	201	100.1	99.2	97.1	99.6	104.6	104.3	101.2	102.3	97.4	103.2	-
Dairy products	202	108.4	107.7	107.3	108.3	111.4	109.6	111.8	116.4	116.0	119.5	-
Preserved fruits and vegetables	203	97.0	97.8	95.6	99.2	100.5	106.8	107.6	109.1	109.2	111.8	-
Grain mill products	204	101.3	107.6	105.4	104.9	107.8	109.2	108.4	115.4	108.0	118.7	-
Bakery products	205	96.8	96.1	92.7	90.6	93.8	94.4	96.4	97.3	95.6	99.3	-
Sugar and confectionery products	206	99.5	101.8	103.2	102.0	99.8	104.5	106.2	108.3	113.8	117.1	-
Fats and oils	207	108.9	116.4	118.1	120.1	114.1	112.6	111.8	120.3	110.1	120.0	-
Beverages	208	106.0	112.7	117.7	120.5	127.6	127.0	130.8	134.3	135.7	136.3	-
Miscellaneous food and kindred products	209	107.0	99.3	99.3	101.6	101.6	105.3	101.0	103.1	109.2	103.9	-
Cigarettes	211	101.2	109.0	113.2	107.6	111.6	106.5	126.6	142.9	147.2	147.2	-
Broadwoven fabric mills, cotton	221	99.6	99.8	103.1	111.2	110.3	117.8	122.1	134.0	137.3	130.9	-
Broadwoven fabric mills, manmade	222	99.2	106.3	111.3	116.2	126.2	131.7	142.5	145.3	147.6	161.9	-
Narrow fabric mills	224	108.4	92.7	96.5	99.6	112.9	111.4	120.1	118.9	126.3	107.7	-
Knitting mills	225	96.3	108.0	107.5	114.1	119.5	128.1	134.3	138.6	150.5	150.2	-
Textile finishing, except wool	226	90.3	88.7	83.4	79.9	78.6	79.3	81.2	78.5	79.2	94.0	-
Carpets and rugs	227	98.6	97.8	93.2	89.2	96.1	97.1	93.3	95.8	100.2	100.3	-
Yarn and thread mills	228	102.1	104.2	110.2	111.4	119.6	126.6	130.7	137.4	147.4	155.5	-
Miscellaneous textile goods	229	101.6	109.1	109.2	104.6	106.5	110.4	118.5	123.7	123.1	117.9	-
Men's and boys' suits and coats	231	105.1	97.7	93.9	90.2	89.0	97.4	97.7	92.5	97.4	130.3	-
Men's and boys' furnishings	232	100.1	100.1	102.1	108.4	109.1	108.4	111.7	123.4	134.7	152.4	-
Women's and misses' outerwear	233	101.4	96.8	104.1	104.3	109.4	121.8	127.4	135.5	141.6	151.5	-
Women's and children's undergarments	234	105.4	94.6	102.1	113.6	117.4	124.5	138.0	161.3	174.5	196.3	-
Hats, caps, and millinery	235	99.0	96.4	89.2	91.1	93.6	87.2	77.7	84.3	82.2	83.5	-
Miscellaneous apparel and accessories	238	101.3	88.4	90.6	91.8	91.3	94.0	105.5	116.8	120.1	105.2	-
Miscellaneous fabricated textile products	239	96.6	95.7	99.9	100.7	107.5	108.5	107.8	109.2	105.6	117.0	-
Logging	241	93.7	89.4	86.3	86.0	96.2	88.6	87.8	86.0	85.4	71.9	-
Sawmills and planing mills	242	100.7	99.6	99.8	102.6	108.1	101.9	103.3	110.2	115.6	117.5	-
Millwork, plywood, and structural members	243	98.8	97.1	98.0	98.0	99.9	97.0	94.5	92.7	92.4	89.9	-
Wood containers	244	103.1	108.8	111.2	113.1	109.4	100.1	100.9	106.1	106.7	106.6	-
Wood buildings and mobile homes	245	97.8	98.8	103.1	103.0	103.1	103.8	98.3	97.0	96.7	101.1	-
Miscellaneous wood products	249	95.9	102.4	107.7	110.5	114.2	115.3	111.8	115.4	114.4	123.1	-
Household furniture	251	99.4	102.0	104.5	107.1	110.5	110.6	112.5	116.9	121.6	121.8	-
Office furniture	252	94.3	97.5	95.0	94.1	102.5	103.2	100.5	101.1	106.4	117.9	-
Public building and related furniture	253	109.6	113.7	119.8	120.2	140.6	161.0	157.4	173.3	181.5	186.5	-
Partitions and fixtures	254	95.7	92.4	95.6	93.0	102.7	107.4	98.9	101.2	97.5	121.4	-
Miscellaneous furniture and fixtures	259	103.6	101.9	103.5	102.1	99.5	103.6	104.7	110.0	113.2	102.2	-
Pulp mills	261	99.6	107.4	116.7	128.3	137.3	122.5	128.9	131.9	132.6	104.4	-
Paper mills	262	103.9	103.6	102.3	99.2	103.3	102.4	110.2	118.6	111.6	107.0	-
Paperboard mills	263	105.5	101.9	100.6	101.4	104.4	108.4	114.9	119.5	118.0	124.2	-
Paperboard containers and boxes	265	99.7	101.5	101.3	103.4	105.2	107.9	108.4	105.1	106.3	110.1	-
Miscellaneous converted paper products	267	101.1	101.6	101.4	105.3	105.5	107.9	110.6	113.3	113.6	121.7	-
Newspapers	271	96.9	95.2	90.6	85.8	81.5	79.4	79.9	79.0	77.4	79.0	-
Periodicals	272	97.9	98.3	93.9	89.5	92.9	89.5	81.9	87.8	89.1	100.1	-
Books	273	99.1	94.1	96.6	100.8	97.7	103.5	103.0	101.6	99.3	102.2	-
Miscellaneous publishing	274	96.7	89.0	92.2	95.9	105.8	104.5	97.5	94.8	93.6	114.5	-
Commercial printing	275	100.0	101.1	102.5	102.0	108.0	106.9	106.5	107.2	108.3	109.2	-
Manifold business forms	276	98.7	89.7	93.0	89.1	94.5	91.1	82.0	76.9	75.2	78.9	-
Greeting cards	277	100.1	109.1	100.6	92.7	96.7	91.4	89.0	92.5	90.8	92.2	-
Blankbooks and bookbinding	278	95.6	94.2	99.4	96.1	103.6	98.7	105.4	108.7	114.5	115.3	-
Printing trade services	279	99.9	94.3	99.3	100.6	112.0	115.3	111.0	116.7	126.2	124.2	-
Industrial inorganic chemicals	281	105.7	104.3	106.8	109.7	109.7	105.6	102.3	109.3	110.1	116.1	-
Plastics materials and synthetics	282	98.8	99.7	100.9	100.0	107.5	112.0	125.3	128.3	125.3	133.8	-
Drugs	283	101.0	102.8	103.8	104.5	99.5	99.9	104.9	108.7	112.1	112.6	-
Soaps, cleaners, and toilet goods	284	102.0	100.6	103.8	105.3	104.4	108.7	111.2	118.6	120.9	130.4	-
Paints and allied products	285	101.4	103.3	106.3	104.3	102.9	108.8	116.7	118.0	125.6	127.2	-

See footnotes at end of table.

42. Continued–Annual indexes of output per hour for selected 3-digit SIC industries

[1987 = 100]

Industry	SIC	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Industrial organic chemicals	286	109.9	110.4	101.4	95.8	94.6	92.2	99.9	98.6	99.0	112.9	-
Agricultural chemicals	287	103.7	104.3	104.7	99.5	99.5	103.8	105.0	108.5	110.0	120.4	-
Miscellaneous chemical products	289	95.4	95.2	97.3	96.1	101.8	107.1	105.7	107.8	110.1	120.2	-
Petroleum refining	291	105.3	109.6	109.2	106.6	111.3	120.1	123.8	132.3	142.0	149.2	-
Asphalt paving and roofing materials	295	98.3	95.3	98.0	94.1	100.4	108.0	104.9	111.2	113.1	120.8	-
Miscellaneous petroleum and coal products	299	98.4	101.9	94.8	90.6	101.5	104.2	96.3	87.4	87.1	97.2	-
Tires and inner tubes	301	102.9	103.8	103.0	102.4	107.8	116.5	124.1	131.1	138.8	148.5	-
Hose and belting and gaskets and packing	305	103.7	96.3	96.1	92.4	97.8	99.7	102.7	104.6	107.4	112.5	-
Fabricated rubber products, n.e.c.	306	104.2	105.5	109.0	109.9	115.2	123.1	119.1	121.5	121.0	125.4	-
Miscellaneous plastics products, n.e.c.	308	100.5	101.8	105.7	108.2	114.4	116.7	120.7	120.9	124.7	130.1	-
Footwear, except rubber	314	101.3	101.1	101.1	94.4	104.2	105.2	113.0	117.1	126.1	129.5	-
Luggage	316	93.7	104.8	106.2	100.3	90.7	89.5	92.3	90.5	110.6	136.4	-
Handbags and personal leather goods	317	98.5	93.1	96.5	98.7	111.2	97.8	86.8	81.8	83.2	109.7	-
Flat glass	321	91.9	90.7	84.5	83.6	92.7	97.7	97.6	99.6	101.5	107.6	-
Glass and glassware, pressed or blown	322	100.6	100.2	104.8	102.3	108.9	108.7	112.9	115.7	121.4	128.2	-
Products of purchased glass	323	95.9	90.1	92.6	97.7	101.5	106.2	105.9	106.1	122.0	125.3	-
Cement, hydraulic	324	103.2	110.2	112.4	108.3	115.1	119.9	125.6	124.3	128.7	133.1	-
Structural clay products	325	98.8	103.1	109.6	109.8	111.4	106.8	114.0	112.6	119.6	116.1	-
Pottery and related products	326	99.6	97.1	98.6	95.8	99.5	100.3	108.4	109.3	119.3	116.1	-
Concrete, gypsum, and plaster products	327	100.8	102.4	102.3	101.2	102.5	104.6	101.5	104.5	107.3	109.2	-
Miscellaneous nonmetallic mineral products	329	103.0	95.5	95.4	94.0	104.3	104.5	106.3	107.8	110.4	112.7	-
Blast furnace and basic steel products	331	112.6	108.0	109.6	107.8	117.1	133.5	142.4	142.7	155.1	160.9	-
Iron and steel foundries	332	104.0	105.4	106.1	104.5	107.2	112.1	113.0	112.7	116.2	121.7	-
Primary nonferrous metals	333	107.8	106.1	102.3	110.7	101.9	107.9	105.3	111.0	110.8	116.0	-
Nonferrous rolling and drawing	335	95.5	93.6	92.7	91.0	96.0	98.3	101.2	99.2	104.0	112.3	-
Nonferrous foundries (castings)	336	102.6	105.1	104.0	103.6	103.6	108.5	112.1	117.8	122.3	126.4	-
Miscellaneous primary metal products	339	106.6	105.0	113.7	109.1	114.5	111.3	134.5	152.2	149.6	140.9	-
Metal cans and shipping containers	341	106.5	108.5	117.6	122.9	127.8	132.3	140.9	144.2	155.2	160.8	-
Cutlery, handtools, and hardware	342	97.8	101.7	97.3	96.8	100.1	104.0	109.2	111.3	118.2	113.1	-
Plumbing and heating, except electric	343	103.7	101.5	102.6	102.0	98.4	102.0	109.1	109.2	118.6	127.2	-
Fabricated structural metal products	344	100.4	96.9	98.8	100.0	103.9	104.8	107.7	105.8	106.5	110.0	-
Screw machine products, bolts, etc.	345	98.5	96.1	96.1	97.9	102.3	104.4	107.2	109.7	110.2	151.3	-
Metal forgings and stampings	346	101.5	99.8	95.6	92.9	103.7	108.7	108.5	109.3	113.6	120.2	-
Metal services, n.e.c.	347	108.3	102.4	104.7	99.4	111.6	120.6	123.0	127.7	128.4	123.5	-
Ordnance and accessories, n.e.c.	348	97.7	89.8	82.1	81.5	88.6	84.6	83.6	87.6	87.5	100.5	-
Miscellaneous fabricated metal products	349	101.4	95.9	97.5	97.4	101.1	102.0	103.2	106.6	108.3	106.2	-
Engines and turbines	351	106.8	110.7	106.5	105.8	103.3	109.2	122.3	122.7	136.6	134.2	-
Farm and garden machinery	352	106.3	110.7	116.5	112.9	113.9	118.6	125.0	134.7	137.2	141.0	-
Construction and related machinery	353	106.5	108.3	107.0	99.1	102.0	108.2	117.7	122.1	123.3	131.8	-
Metalworking machinery	354	101.0	103.5	101.1	96.4	104.3	107.4	109.9	114.8	114.9	118.6	-
Special industry machinery	355	104.6	108.3	107.5	108.3	106.0	113.6	121.2	132.3	134.0	130.1	-
General industrial machinery	356	105.9	101.5	101.5	101.6	101.6	104.8	106.7	109.0	109.4	110.1	-
Refrigeration and service machinery	358	102.1	106.0	103.6	100.7	104.9	108.6	110.7	112.7	114.7	114.8	-
Industrial machinery, n.e.c.	359	106.5	107.1	107.3	109.0	117.0	118.5	127.4	138.8	141.4	129.7	-
Electric distribution equipment	361	105.4	105.0	106.3	106.5	119.6	122.2	131.8	143.0	143.9	143.9	-
Electrical industrial apparatus	362	104.6	107.4	107.7	107.1	117.1	132.9	134.9	150.8	154.3	163.9	-
Household appliances	363	103.0	104.7	105.8	106.5	115.0	123.4	131.4	127.3	127.4	138.1	-
Electric lighting and wiring equipment	364	101.9	100.2	99.9	97.5	105.7	107.8	113.4	113.7	116.9	121.4	-
Communications equipment	366	110.5	107.2	121.4	124.5	146.7	150.3	166.0	170.9	190.3	221.0	-
Miscellaneous electrical equipment & supplies	369	102.8	99.6	90.6	98.6	101.3	108.2	110.5	114.1	123.1	124.6	-
Motor vehicles and equipment	371	103.2	103.3	102.4	96.6	104.2	106.2	108.8	106.7	107.2	116.5	-
Aircraft and parts	372	100.6	98.2	98.9	108.2	112.4	115.2	109.6	107.8	113.0	114.0	-
Ship and boat building and repairing	373	99.4	97.6	103.7	96.3	102.7	106.2	103.8	98.0	99.2	104.3	-
Railroad equipment	374	113.5	135.3	141.1	146.9	147.9	151.0	152.5	150.0	148.3	183.2	-
Motorcycles, bicycles, and parts	375	92.6	94.6	93.8	99.8	108.4	130.9	125.1	120.3	125.5	120.5	-
Guided missiles, space vehicles, parts	376	104.1	110.6	116.5	110.5	110.5	122.1	118.9	121.0	129.4	126.6	-
Search and navigation equipment	381	104.8	105.8	112.7	118.9	122.1	129.1	132.1	149.5	142.2	148.9	-
Measuring and controlling devices	382	103.9	102.1	107.0	113.9	121.0	125.2	135.0	147.8	151.9	144.3	-
Medical instruments and supplies	384	105.2	107.9	116.9	118.7	123.5	127.3	126.7	131.5	139.8	146.3	-
Ophthalmic goods	385	112.6	123.3	121.2	125.1	144.5	157.8	160.6	167.2	188.2	202.6	-
Photographic equipment & supplies	386	105.6	113.0	107.8	110.2	116.4	126.9	132.7	129.5	128.7	121.6	-

See footnotes at end of table.

42. Continued--Annual indexes of output per hour for selected 3-digit SIC industries

[1987 = 100]

Industry	SIC	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Jewelry, silverware, and plated ware	391	100.1	102.9	99.3	95.8	96.7	96.7	99.5	100.2	102.6	117.2	-
Musical instruments	393	101.8	96.1	97.1	96.9	96.0	95.6	88.7	86.9	78.8	83.9	-
Toys and sporting goods	394	104.8	106.0	108.1	109.7	104.9	114.2	109.7	113.6	119.9	139.6	-
Pens, pencils, office, and art supplies	395	108.3	112.9	118.2	116.8	111.3	111.6	129.9	135.2	144.1	127.7	-
Costume jewelry and notions	396	102.0	93.8	105.3	106.7	110.8	115.8	129.0	143.7	142.2	119.1	-
Miscellaneous manufactures	399	102.1	100.9	106.5	109.2	109.5	107.7	106.1	108.1	112.8	109.3	-
Transportation												
Trucking, except local	4213	105.2	109.3	111.1	116.9	123.4	126.6	129.5	125.4	130.9	132.4	130.1
U.S. postal service	431	99.9	99.7	104.0	103.7	104.5	107.1	106.6	106.5	104.7	108.3	109.5
Air transportation	4512,13,22 (pts.)	99.5	95.8	92.9	92.5	96.9	100.2	105.7	108.6	111.6	111.1	108.5
Utilities												
Telephone communications	481	106.2	111.6	113.3	119.8	127.7	135.5	142.2	148.1	159.5	160.9	171.2
Radio and television broadcasting	483	103.1	106.2	104.9	106.1	108.3	106.7	110.1	109.6	105.8	101.1	100.8
Cable and other pay TV services	484	102.0	99.7	92.5	87.5	88.3	86.7	85.6	86.7	84.4	87.6	88.0
Electric utilities	491,3 (pt.)	104.9	107.7	110.1	113.4	115.2	120.6	126.8	135.0	150.5	146.5	157.2
Gas utilities	492,3 (pt.)	108.3	111.2	105.8	109.6	111.1	121.8	125.6	137.1	158.6	145.9	153.4
Trade												
Lumber and other building materials dealers	521	101.0	99.1	103.6	101.3	105.4	110.5	118.3	117.6	121.7	122.2	133.0
Paint, glass, and wallpaper stores	523	102.8	101.7	106.0	99.4	106.5	114.7	130.2	135.3	140.2	143.8	166.0
Hardware stores	525	108.6	115.2	110.5	102.5	107.2	105.8	112.7	108.5	112.1	111.2	125.3
Retail nurseries, lawn and garden supply stores	526	106.7	103.4	83.9	88.5	100.4	106.6	116.6	117.2	136.6	128.1	136.1
Department stores	531	99.2	97.0	94.2	98.2	100.9	105.7	108.6	110.9	118.4	123.5	129.4
Variety stores	533	101.9	124.4	151.2	154.2	167.7	184.7	190.1	203.2	229.2	247.6	262.5
Miscellaneous general merchandise stores	539	100.8	109.8	116.4	121.8	136.1	159.7	160.9	163.9	164.9	168.2	189.9
Grocery stores	541	98.9	95.4	94.6	93.7	93.3	92.8	92.5	91.2	89.4	89.2	90.2
Meat and fish (seafood) markets	542	99.0	97.6	96.8	88.4	95.8	93.7	91.1	89.1	81.1	84.7	89.9
Retail bakeries	546	89.8	83.3	89.7	94.7	94.0	86.5	87.2	86.8	81.7	75.4	65.0
New and used car dealers	551	103.4	102.5	106.1	104.1	106.5	107.6	108.7	107.1	108.2	107.8	108.0
Auto and home supply stores	553	103.2	101.6	102.7	99.0	100.0	98.7	102.6	105.7	104.6	104.2	107.0
Gasoline service stations	554	103.0	105.2	102.6	104.3	109.7	115.2	120.4	126.3	125.1	125.0	130.6
Men's and boys' wear stores	561	106.0	109.6	113.7	119.2	118.2	115.5	117.9	117.5	125.7	132.2	145.5
Women's clothing stores	562	97.8	99.5	101.5	103.0	112.2	118.4	119.3	128.5	142.3	145.8	154.8
Family clothing stores	565	102.0	104.9	104.5	106.4	111.7	114.5	120.4	133.8	138.8	142.1	145.6
Shoe stores	566	102.7	107.2	106.1	105.1	111.5	113.2	126.3	134.5	146.9	143.5	136.4
Miscellaneous apparel and accessory stores	569	96.3	95.2	88.6	78.8	89.1	92.9	100.4	122.1	127.1	118.1	131.0
Furniture and homefurnishings stores	571	98.6	100.9	101.8	101.5	108.4	107.6	108.8	112.0	118.6	119.4	121.6
Household appliance stores	572	98.5	103.5	102.8	105.2	113.9	117.0	121.2	138.7	141.8	155.5	184.5
Radio, television, computer, and music stores	573	118.6	114.6	119.6	128.3	137.8	152.7	177.0	196.7	204.6	215.1	258.9
Eating and drinking places	581	102.8	102.2	104.0	103.1	102.5	102.8	101.1	100.9	99.5	100.5	101.1
Drug and proprietary stores	591	101.9	102.5	103.6	104.7	103.6	105.4	105.7	106.9	109.6	115.4	117.7
Liquor stores	592	98.2	101.1	105.2	105.9	108.4	100.7	99.1	103.7	112.8	108.9	113.9
Used merchandise stores	593	105.3	104.9	100.3	98.6	110.4	112.1	115.4	117.3	129.8	138.0	158.4
Miscellaneous shopping goods stores	594	100.7	104.2	104.2	105.0	102.7	106.5	111.9	117.8	120.0	123.7	131.5
Nonstore retailers	596	105.6	110.8	108.8	109.3	122.1	127.5	143.3	146.1	165.5	177.2	193.5
Fuel dealers	598	95.6	92.0	84.4	85.3	84.4	92.7	100.7	114.2	115.8	113.4	112.0
Retail stores, n.e.c.	599	105.9	103.1	113.7	103.2	111.6	117.3	125.0	126.2	139.5	147.3	157.6
Finance and services												
Commercial banks	602	102.8	104.8	107.7	110.1	111.0	118.5	121.7	126.4	129.7	133.0	133.0
Hotels and motels	701	97.6	95.0	96.1	99.1	107.8	106.2	109.6	110.1	109.7	107.9	108.8
Laundry, cleaning, and garment services	721	97.2	99.7	101.8	99.2	98.3	98.9	104.0	105.5	108.7	108.0	113.5
Photographic studios, portrait	722	100.1	94.9	96.6	92.8	97.7	105.9	117.4	129.3	126.6	133.7	153.4
Beauty shops	723	95.1	99.6	96.8	94.8	99.6	95.7	99.8	103.5	106.3	107.5	108.4
Barber shops	724	108.8	111.6	100.2	94.1	112.1	120.8	117.7	114.6	127.6	149.0	153.0
Funeral services and crematories	726	102.5	97.9	90.9	89.5	103.2	98.2	103.8	99.7	97.1	101.3	107.0
Automotive repair shops	753	105.7	108.1	106.9	98.7	103.3	104.0	112.3	119.5	114.1	115.2	121.2
Motion picture theaters	783	107.1	114.3	115.8	116.0	110.8	109.8	106.5	101.4	100.5	99.8	101.3

Refers to output per employee.

~ Refers to ouput per full-time equivalent employee year on fiscal basis.

n.e.c. = not elsewhere classified

- Data not available.

43. Unemployment rates, approximating U.S. concepts, in nine countries, quarterly data seasonally adjusted

Country	Annual average		1998				1999			
	1998	1999	I	II	III	IV	I	II	III	IV
United States	4.5	4.2	4.7	4.4	4.5	4.4	4.3	4.3	4.2	4.1
Canada	8.3	7.6	8.6	8.3	8.2	8.1	7.9	7.8	7.6	7.0
Australia	8.0	7.2	8.1	8.0	8.1	7.7	7.5	7.4	7.1	7.0
Japan	4.1	4.7	3.7	4.2	4.3	4.5	4.7	4.8	4.8	4.7
France	11.8	11.1	12.0	11.7	11.7	11.5	11.3	11.2	11.0	10.6
Germany	9.4	9.0	9.9	9.5	9.1	9.1	9.0	9.0	9.1	9.0
Italy[1]	12.0	11.5	11.8	12.0	12.0	12.0	11.9	11.6	11.6	11.1
Sweden	8.4	7.1	8.8	8.7	8.5	7.6	7.2	7.0	7.0	7.1
United Kingdom	6.3	6.1	6.4	6.3	6.3	6.3	6.3	6.1	5.9	5.9

[1] Quarterly rates are for the first month of the quarter.

NOTE: Quarterly figures for France, Germany, and the United Kingdom are calculated by applying annual adjustment factors to current published data, and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. See "Notes on the data" for information on breaks in series. For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries,1959–1998* (Bureau of Labor Statistics, Oct. 22, 1999).

44. Annual data: Employment status of the working-age population, approximating U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Civilian labor force										
United States[1]	125,840	126,346	128,105	129,200	131,056	132,304	133,943	136,297	137,673	139,368
Canada	14,241	14,330	14,362	14,505	14,627	14,750	14,900	15,153	15,418	15,721
Australia	8,444	8,490	8,562	8,619	8,776	9,001	9,127	9,221	9,347	9,470
Japan	63,050	64,280	65,040	65,470	65,780	65,990	66,450	67,200	67,240	67,100
France	24,300	24,490	24,550	24,650	24,760	24,820	25,090	25,180	25,360	25,590
Germany[2]	29,410	39,130	39,040	39,140	39,210	39,100	39,180	39,450	39,430	–
Italy	22,670	22,940	22,910	22,570	22,450	22,460	22,570	22,680	22,960	23,130
Netherlands	6,640	6,750	6,950	7,090	7,190	7,270	7,370	7,530	7,720	–
Sweden	4,597	4,591	4,520	4,443	4,418	4,460	4,459	4,418	4,402	4,430
United Kingdom	28,730	28,610	28,410	28,310	28,280	28,480	28,620	28,760	28,870	29,090
Participation rate[3]										
United States[1]	66.5	66.2	66.4	66.3	66.6	66.6	66.8	67.1	67.1	67.1
Canada	67.1	66.5	65.7	65.4	65.2	64.9	64.7	64.9	65.1	65.6
Australia	64.6	64.1	63.9	63.6	63.9	64.6	64.6	64.3	64.4	64.2
Japan	62.6	63.2	63.4	63.3	63.1	62.9	63.0	63.2	62.8	62.4
France	56.0	56.0	55.8	55.6	55.5	55.2	55.5	55.3	55.4	55.7
Germany[2]	55.3	58.9	58.3	58.0	57.6	57.3	57.4	57.6	57.6	–
Italy	47.2	47.7	47.5	47.9	47.3	47.1	47.1	47.2	47.6	47.8
Netherlands	56.1	56.5	57.8	58.5	59.0	59.3	59.8	60.7	62.0	–
Sweden	67.4	67.0	65.7	64.5	63.7	64.1	64.0	63.3	62.8	63.2
United Kingdom	64.1	63.7	63.1	62.8	62.5	62.7	62.7	62.8	62.7	62.9
Employed										
United States[1]	118,793	117,718	118,492	120,259	123,060	124,900	126,708	129,558	131,463	133,488
Canada	13,084	12,851	12,760	12,858	13,112	13,357	13,463	13,774	14,140	14,531
Australia	7,859	7,676	7,637	7,680	7,921	8,235	8,344	8,429	8,597	8,785
Japan	61,710	62,920	63,620	63,810	63,860	63,890	64,200	64,900	64,450	63,930
France	22,100	22,140	21,990	21,740	21,710	21,890	21,960	22,060	22,390	22,760
Germany[2]	27,950	36,920	36,420	36,030	35,890	35,900	35,680	35,540	35,720	–
Italy	21,080	21,360	21,230	20,270	19,940	19,820	19,920	19,990	20,210	20,460
Netherlands	6,230	6,350	6,560	6,620	6,670	6,760	6,900	7,130	7,410	–
Sweden	4,513	4,447	4,265	4,028	3,992	4,056	4,019	3,973	4,034	4,117
United Kingdom	26,740	26,090	25,530	25,340	25,550	26,000	26,280	26,740	27,050	27,330
Employment-population ratio[4]										
United States[1]	62.8	61.7	61.5	61.7	62.5	62.9	63.2	63.8	64.1	64.3
Canada	61.7	59.7	58.4	58.0	58.4	58.8	58.5	59.0	59.7	60.6
Australia	60.1	57.9	57.0	56.6	57.7	59.1	59.1	58.8	59.2	59.6
Japan	61.3	61.8	62.0	61.7	61.3	60.9	60.9	61.0	60.2	59.4
France	50.9	50.6	49.9	49.0	48.7	48.7	48.5	48.4	48.9	49.6
Germany[2]	52.6	55.5	54.4	53.4	52.8	52.6	52.2	51.9	52.2	–
Italy	43.9	44.5	44.0	43.0	42.0	41.5	41.6	41.6	41.9	42.3
Netherlands	52.6	53.2	54.5	54.7	54.7	55.1	55.9	57.5	59.5	–
Sweden	66.1	64.9	62.0	58.5	57.6	58.3	57.7	56.9	57.6	58.7
United Kingdom	59.6	58.0	56.7	56.2	56.5	57.2	57.6	58.3	58.7	59.1
Unemployed										
United States	7,047	8,628	9,613	8,940	7,996	7,404	7,236	6,739	6,210	6,210
Canada	1,157	1,480	1,602	1,647	1,515	1,393	1,437	1,379	1,277	1,190
Australia	585	814	925	939	856	766	783	791	750	685
Japan	1,340	1,360	1,420	1,660	1,920	2,100	2,250	2,300	2,790	3,170
France	2,210	2,350	2,560	2,910	3,050	2,920	3,130	3,120	2,980	2,830
Germany[2]	1,460	2,210	2,620	3,110	3,320	3,200	3,500	3,910	3,710	–
Italy	1,590	1,580	1,680	2,300	2,510	2,640	2,650	2,690	2,750	2,670
Netherlands	410	400	390	470	520	510	470	400	310	–
Sweden	84	144	255	415	426	404	440	445	368	313
United Kingdom	1,990	2,520	2,880	2,970	2,730	2,480	2,340	2,020	1,820	1,760
Unemployment rate										
United States	5.6	6.8	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2
Canada	8.1	10.3	11.2	11.4	10.4	9.4	9.6	9.1	8.3	7.6
Australia	6.9	9.6	10.8	10.9	9.7	8.5	8.6	8.6	8.0	7.2
Japan	2.1	2.1	2.2	2.5	2.9	3.2	3.4	3.4	4.1	4.7
France	9.1	9.6	10.4	11.8	12.3	11.8	12.5	12.4	11.8	11.1
Germany[2]	5.0	5.6	6.7	7.9	8.5	8.2	8.9	9.9	9.4	9.0
Italy	7.0	6.9	7.3	10.2	11.2	11.8	11.7	11.9	12.0	11.5
Netherlands	6.2	5.9	5.6	6.6	7.2	7.0	6.4	5.3	4.0	–
Sweden	1.8	3.1	5.6	9.3	9.6	9.1	9.9	10.1	8.4	7.1
United Kingdom	6.9	8.8	10.1	10.5	9.7	8.7	8.2	7.0	6.3	6.1

[1] Data for 1994 are not directly comparable with data for 1993 and earlier years. For additional information, see the box note under "Employment and Unemployment Data" in the notes to this section.

[2] Data from 1991 onward refer to unified Germany. See *Comparative Civilian Labor Force Statistics, Ten Countries, 1959–1998*, October 22, 1999, on the Internet at **http://stats.bls.gov/flsdata.htm**.

[3] Labor force as a percent of the working-age population.

[4] Employment as a percent of the working-age population.

NOTE: See "Notes on the data" for information on breaks in series for the United States, France, Germany, Italy, the Netherlands, and Sweden. Dash indicates data not available.

45. Annual indexes of manufacturing productivity and related measures, 12 countries

[1992 = 100]

Item and country	1960	1970	1980	1987	1988	1989	1990	1991	1993	1994	1995	1996	1997	1998
Output per hour														
United States	–	–	71.9	94.4	98.0	97.1	97.8	98.3	102.1	108.3	114.9	117.3	122.1	127.9
Canada	40.7	59.2	75.3	91.3	91.1	92.4	95.3	95.1	102.5	106.2	108.9	107.3	111.0	111.7
Japan	14.0	38.0	63.9	81.2	84.8	89.5	95.4	99.4	100.5	101.8	109.3	115.8	121.4	120.4
Belgium	18.0	32.9	65.4	88.9	92.0	96.9	96.8	99.1	102.5	108.4	113.2	114.7	121.8	122.6
Denmark	29.9	52.7	90.3	90.6	94.1	99.6	99.1	99.6	104.5	–	–	–	–	–
France	21.8	43.1	66.7	81.8	87.4	91.9	93.5	96.9	100.6	108.5	114.4	114.9	123.2	127.4
Germany	29.2	52.0	77.2	88.1	91.5	94.6	99.0	101.9	100.6	107.9	111.2	115.1	121.8	127.1
Italy	19.6	36.8	64.1	85.1	86.7	89.4	92.5	95.2	102.9	105.6	109.3	110.3	113.4	113.6
Netherlands	18.6	38.1	69.2	91.6	93.7	97.1	98.6	99.6	101.4	112.7	117.7	119.7	125.7	127.8
Norway	36.7	57.8	76.7	93.3	92.1	94.6	96.6	97.5	100.6	101.4	102.0	102.0	101.9	104.1
Sweden	27.6	52.8	74.0	90.1	90.8	93.8	95.0	95.0	106.7	116.1	122.4	125.4	133.6	136.5
United Kingdom	31.2	44.7	56.1	79.4	82.3	86.2	88.3	92.2	104.0	106.8	104.8	103.2	104.0	105.1
Output														
United States	–	–	77.3	97.9	104.5	104.0	102.5	98.7	103.5	112.2	119.6	121.6	128.8	135.0
Canada	34.2	60.5	85.4	103.2	109.3	110.8	106.6	98.8	105.1	113.2	118.8	120.2	128.0	133.0
Japan	10.7	38.8	59.9	78.4	84.6	90.2	96.3	101.4	96.0	95.4	100.6	106.7	111.1	103.6
Belgium	30.7	57.6	78.2	88.8	93.3	99.1	101.0	100.7	97.0	101.4	104.2	104.2	109.0	111.8
Denmark	40.8	68.0	91.3	99.3	100.8	104.3	102.7	101.7	99.0	109.3	114.7	117.8	120.3	126.5
France	31.0	64.1	88.7	87.2	92.2	97.2	99.1	99.8	95.7	100.3	104.8	104.5	110.2	114.6
Germany	41.5	70.9	85.3	88.0	90.9	94.0	99.1	102.8	91.8	93.5	93.7	92.5	95.8	100.7
Italy	21.4	44.7	78.4	88.2	94.5	98.1	99.6	99.2	96.4	102.2	107.2	106.7	110.4	112.5
Netherlands	31.7	59.5	77.4	89.5	92.8	96.9	100.1	100.6	98.2	104.2	107.8	108.4	114.1	116.6
Norway	56.5	89.1	103.6	110.7	105.3	101.3	100.2	98.3	102.7	106.7	109.0	110.1	113.3	116.4
Sweden	46.5	81.7	91.8	107.7	110.2	111.6	110.6	103.6	101.3	115.7	130.1	132.9	140.3	146.4
United Kingdom	67.7	90.3	87.2	94.4	101.4	105.4	105.3	100.0	101.4	106.1	107.8	108.2	109.6	110.0
Total hours														
United States	92.1	104.4	107.5	103.8	106.6	107.1	104.8	100.4	101.4	103.6	104.0	103.7	105.5	105.6
Canada	84.1	102.1	113.5	113.0	120.0	119.9	111.9	103.8	102.6	106.6	109.1	112.0	115.4	119.0
Japan	76.3	102.3	93.8	96.6	99.8	100.8	100.9	102.0	95.6	93.7	92.0	92.2	91.5	86.1
Belgium	170.7	174.7	119.7	100.0	101.5	102.3	104.3	101.5	94.7	93.6	92.0	90.8	89.5	91.2
Denmark	136.5	129.0	101.1	109.6	107.2	104.7	103.7	102.1	94.8	–	–	–	–	–
France	142.1	148.7	133.1	106.6	105.5	105.8	105.9	103.0	95.1	92.4	91.6	91.0	89.5	89.9
Germany	142.3	136.3	110.5	99.9	99.3	99.3	100.1	100.9	91.3	86.7	84.3	80.4	78.6	79.3
Italy	109.0	121.2	122.4	103.6	108.9	109.7	107.7	104.2	93.6	96.7	98.0	96.7	97.4	99.0
Netherlands	170.6	156.2	111.8	97.7	99.0	99.8	101.5	101.0	96.9	92.4	91.6	90.5	90.8	91.2
Norway	154.0	154.3	135.0	118.6	114.3	107.1	103.7	100.8	102.1	105.2	106.9	107.9	111.1	111.9
Sweden	168.3	154.7	124.0	119.5	121.4	119.0	116.4	109.0	94.9	99.6	106.3	106.0	105.0	107.3
United Kingdom	217.3	202.1	155.3	118.9	123.2	122.3	119.2	108.5	97.5	99.4	102.9	104.8	105.4	104.7
Compensation per hour														
United States	14.9	23.7	55.6	80.7	84.0	86.6	90.8	95.6	102.7	105.6	107.9	109.3	113.4	119.4
Canada	10.4	17.8	47.7	75.3	77.8	82.5	89.5	94.7	99.6	100.4	103.6	102.8	106.7	110.8
Japan	4.3	16.5	58.6	77.9	79.2	84.2	90.7	95.9	104.6	106.7	109.5	110.9	113.9	115.8
Belgium	5.4	13.7	52.5	79.7	81.1	85.9	90.1	97.3	104.8	106.1	109.2	112.0	115.2	116.0
Denmark	4.6	13.3	49.6	80.1	82.9	87.7	92.7	95.9	104.6	–	–	–	–	–
France	4.3	10.3	40.8	78.6	81.6	86.0	90.6	96.2	102.8	105.0	107.6	109.5	112.3	113.9
Germany	8.1	20.7	53.6	76.0	79.1	83.2	89.4	95.1	105.9	111.7	117.7	123.7	126.6	127.6
Italy	1.6	4.7	28.2	66.7	69.3	75.9	84.4	93.6	107.5	107.8	112.8	120.9	125.9	124.8
Netherlands	6.4	20.2	64.4	87.8	87.7	88.5	90.8	95.2	103.7	108.2	110.6	113.2	115.8	118.3
Norway	4.7	11.8	39.0	78.5	83.3	87.2	92.3	97.5	101.5	104.4	109.2	113.6	119.1	126.4
Sweden	4.1	10.8	37.4	67.3	71.7	79.4	87.6	95.4	98.0	101.1	106.2	113.4	118.3	121.5
United Kingdom	3.1	6.3	33.2	64.8	67.7	72.9	80.9	90.5	104.3	106.5	107.4	108.2	111.4	117.8
Unit labor costs: National currency basis														
United States	–	–	77.2	85.5	85.7	89.2	92.8	97.2	100.6	97.6	93.9	93.2	92.9	93.4
Canada	25.5	30.0	63.3	82.5	85.5	89.2	93.9	99.6	97.2	94.5	95.2	95.8	96.2	99.2
Japan	30.9	43.3	91.7	96.0	93.4	94.0	95.0	96.5	104.1	104.9	100.1	95.8	93.8	96.2
Belgium	30.1	41.7	80.3	89.7	88.1	88.7	93.0	98.1	102.3	97.9	96.4	97.6	94.6	94.7
Denmark	15.4	25.2	55.0	88.4	88.2	88.1	93.6	96.3	100.1	93.0	93.8	92.7	95.9	94.0
France	19.5	24.0	61.2	96.2	93.4	93.6	96.8	99.3	102.2	96.8	94.1	95.3	91.2	89.4
Germany	27.8	39.8	69.4	86.3	86.5	87.9	90.3	93.3	105.3	103.6	105.9	107.5	103.9	100.4
Italy	8.0	12.7	44.0	78.3	79.9	84.9	91.3	98.4	104.4	102.1	103.2	109.6	111.1	109.8
Netherlands	34.4	52.9	93.0	95.9	93.6	91.1	92.1	95.5	102.3	96.0	94.0	94.6	92.2	92.5
Norway	12.9	20.4	50.8	84.1	90.4	92.2	95.6	100.0	100.9	102.9	107.1	111.4	116.9	121.4
Sweden	14.9	20.5	50.6	74.7	79.0	84.7	92.3	100.4	91.8	87.0	86.8	90.4	88.5	89.0
United Kingdom	9.8	14.1	59.1	81.6	82.2	84.6	91.6	98.2	100.3	99.7	102.5	104.8	107.1	112.1
Unit labor costs: U.S. dollar basis														
United States	–	–	77.2	85.5	85.7	89.2	92.8	97.2	100.6	97.6	93.9	93.2	92.9	93.4
Canada	31.8	34.7	65.4	75.2	83.9	91.0	97.2	105.0	91.1	83.6	83.8	84.9	83.9	80.8
Japan	10.9	15.3	51.3	84.2	92.4	86.3	83.1	90.9	118.8	130.1	135.1	111.7	98.3	93.1
Belgium	19.4	27.0	88.3	77.2	77.0	72.3	89.5	92.3	95.1	94.2	105.2	101.4	84.9	83.8
Denmark	13.5	20.3	58.9	77.9	79.0	72.6	91.3	90.8	93.2	88.3	101.1	96.5	87.6	84.7
France	21.1	23.0	76.7	84.7	82.9	77.7	94.1	93.1	95.5	92.4	99.9	98.6	82.6	80.2
Germany	10.4	17.1	59.6	74.9	76.9	73.0	87.3	87.8	99.4	99.8	115.5	111.6	93.5	89.1
Italy	16.0	24.9	63.3	74.4	75.6	76.2	93.8	97.6	81.8	78.1	78.0	87.5	80.3	77.9
Netherlands	16.0	25.7	82.3	83.2	83.2	75.5	88.9	89.8	96.8	92.8	103.0	98.6	83.0	82.0
Norway	11.3	17.8	63.9	77.5	86.1	82.9	95.0	95.7	88.3	90.7	105.0	107.1	102.5	99.9
Sweden	16.8	23.0	69.6	68.5	75.0	76.4	90.8	96.6	68.6	65.7	70.8	78.5	67.5	65.2
United Kingdom	15.6	19.2	77.8	75.7	82.9	78.5	92.5	98.2	85.3	86.5	91.6	95.6	99.3	105.2

– Data not available.

46. Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]											
	1987	1988	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]
PRIVATE SECTOR[5]												
Total cases	8.3	8.6	8.6	8.8	8.4	8.9	8.5	8.4	8.1	7.4	7.1	6.7
Lost workday cases	3.8	4.0	4.0	4.1	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.1
Lost workdays	69.9	76.1	78.7	84.0	86.5	93.8	–	–	–	–	–	–
Agriculture, forestry, and fishing[5]												
Total cases	11.2	10.9	10.9	11.6	10.8	11.6	11.2	10.0	9.7	8.7	8.4	7.9
Lost workday cases	5.7	5.6	5.7	5.9	5.4	5.4	5.0	4.7	4.3	3.9	4.1	3.9
Lost workdays	94.1	101.8	100.9	112.2	108.3	126.9	–	–	–	–	–	–
Mining												
Total cases	8.5	8.8	8.5	8.3	7.4	7.3	6.8	6.3	6.2	5.4	5.9	4.9
Lost workday cases	4.9	5.1	4.8	5.0	4.5	4.1	3.9	3.9	3.9	3.2	3.7	2.9
Lost workdays	144.0	152.1	137.2	119.5	129.6	204.7	–	–	–	–	–	–
Construction												
Total cases	14.7	14.6	14.3	14.2	13.0	13.1	12.2	11.8	10.6	9.9	9.5	8.8
Lost workday cases	6.8	6.8	6.8	6.7	6.1	5.8	5.5	5.5	4.9	4.5	4.4	4.0
Lost workdays	135.8	142.2	143.3	147.9	148.1	161.9	–	–	–	–	–	–
General building contractors:												
Total cases	14.2	14.0	13.9	13.4	12.0	12.2	11.5	10.9	9.8	9.0	8.5	8.4
Lost workday cases	6.5	6.4	6.5	6.4	5.5	5.4	5.1	5.1	4.4	4.0	3.7	3.9
Lost workdays	134.0	132.2	137.3	137.6	132.0	142.7	–	–	–	–	–	–
Heavy construction, except building:												
Total cases	14.5	15.1	13.8	13.8	12.8	12.1	11.1	10.2	9.9	9.0	8.7	8.2
Lost workday cases	6.4	7.0	6.5	6.3	6.0	5.4	5.1	5.0	4.8	4.3	4.3	4.1
Lost workdays	139.1	162.3	147.1	144.6	160.1	165.8	–	–	–	–	–	–
Special trades contractors:												
Total cases	15.0	14.7	14.6	14.7	13.5	13.8	12.8	12.5	11.1	10.4	10.0	9.1
Lost workday cases	7.1	7.0	6.9	6.9	6.3	6.1	5.8	5.8	5.0	4.8	4.7	4.1
Lost workdays	135.7	141.1	144.9	153.1	151.3	168.3	–	–	–	–	–	–
Manufacturing												
Total cases	11.9	13.1	13.1	13.2	12.7	12.5	12.1	12.2	11.6	10.6	10.3	9.7
Lost workday cases	5.3	5.7	5.8	5.8	5.6	5.4	5.3	5.5	5.3	4.9	4.8	4.7
Lost workdays	95.5	107.4	113.0	120.7	121.5	124.6	–	–	–	–	–	–
Durable goods:												
Total cases	12.5	14.2	14.1	14.2	13.6	13.4	13.1	13.5	12.8	11.6	11.3	10.7
Lost workday cases	5.4	5.9	6.0	6.0	5.7	5.5	5.4	5.7	5.6	5.1	5.1	5.0
Lost workdays	96.8	111.1	116.5	123.3	122.9	126.7	–	–	–	–	–	–
Lumber and wood products:												
Total cases	18.9	19.5	18.4	18.1	16.8	16.3	15.9	15.7	14.9	14.2	13.5	13.2
Lost workday cases	9.6	10.0	9.4	8.8	8.3	7.6	7.6	7.7	7.0	6.8	6.5	6.8
Lost workdays	176.5	189.1	177.5	172.5	172.0	165.8	–	–	–	–	–	–
Furniture and fixtures:												
Total cases	15.4	16.6	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4
Lost workday cases	6.7	7.3	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7
Lost workdays	103.6	115.7	–	–	–	128.4	–	–	–	–	–	–
Stone, clay, and glass products:												
Total cases	14.9	16.0	15.5	15.4	14.8	13.6	13.8	13.2	12.3	12.4	11.8	11.8
Lost workday cases	7.1	7.5	7.4	7.3	6.8	6.1	6.3	6.5	5.7	6.0	5.7	6.0
Lost workdays	135.8	141.0	149.8	160.5	156.0	152.2	–	–	–	–	–	–
Primary metal industries:												
Total cases	17.0	19.4	18.7	19.0	17.7	17.5	17.0	16.8	16.5	15.0	15.0	14.0
Lost workday cases	7.4	8.2	8.1	8.1	7.4	7.1	7.3	7.2	7.2	6.8	7.2	7.0
Lost workdays	145.8	161.3	168.3	180.2	169.1	175.5	–	–	–	–	–	–
Fabricated metal products:												
Total cases	17.0	18.8	18.5	18.7	17.4	16.8	16.2	16.4	15.8	14.4	14.2	13.9
Lost workday cases	7.2	8.0	7.9	7.9	7.1	6.6	6.7	6.7	6.9	6.2	6.4	6.5
Lost workdays	121.9	138.8	147.6	155.7	146.6	144.0	–	–	–	–	–	–
Industrial machinery and equipment:												
Total cases	11.3	12.1	12.1	12.0	11.2	11.1	11.1	11.6	11.2	9.9	10.0	9.5
Lost workday cases	4.4	4.7	4.8	4.7	4.4	4.2	4.2	4.4	4.4	4.0	4.1	4.0
Lost workdays	72.7	82.8	86.8	88.9	86.6	87.7	–	–	–	–	–	–
Electronic and other electrical equipment:												
Total cases	7.2	8.0	9.1	9.1	8.6	8.4	8.3	8.3	7.6	6.8	6.6	5.9
Lost workday cases	3.1	3.3	3.9	3.8	3.7	3.6	3.5	3.6	3.3	3.1	3.1	2.8
Lost workdays	55.9	64.6	77.5	79.4	83.0	81.2	–	–	–	–	–	–
Transportation equipment:												
Total cases	13.5	17.7	17.7	17.8	18.3	18.7	18.5	19.6	18.6	16.3	15.4	14.6
Lost workday cases	5.7	6.6	6.8	6.9	7.0	7.1	7.1	7.8	7.9	7.0	6.6	6.6
Lost workdays	105.7	134.2	138.6	153.7	166.1	186.6	–	–	–	–	–	–
Instruments and related products:												
Total cases	5.8	6.1	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0
Lost workday cases	2.4	2.6	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9
Lost workdays	43.9	51.5	55.4	57.8	64.4	65.3	–	–	–	–	–	–
Miscellaneous manufacturing industries:												
Total cases	10.7	11.3	11.1	11.3	11.3	10.7	10.0	9.9	9.1	9.5	8.9	8.1
Lost workday cases	4.6	5.1	5.1	5.1	5.1	5.0	4.6	4.5	4.3	4.4	4.2	3.9
Lost workdays	81.5	91.0	97.6	113.1	104.0	108.2	–	–	–	–	–	–

See footnotes at end of table.

46. Continued—Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]											
	1987	1988	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]
Nondurable goods:												
Total cases	11.1	11.4	11.6	11.7	11.5	11.3	10.7	10.5	9.9	9.2	8.8	8.2
Lost workday cases	5.1	5.4	5.5	5.6	5.5	5.3	5.0	5.1	4.9	4.6	4.4	4.3
Lost workdays	93.5	101.7	107.8	116.9	119.7	121.8	–	–	–	–	–	–
Food and kindred products:												
Total cases	17.7	18.5	18.5	20.0	19.5	18.8	17.6	17.1	16.3	15.0	14.5	13.6
Lost workday cases	8.6	9.2	9.3	9.9	9.9	9.5	8.9	9.2	8.7	8.0	8.0	7.5
Lost workdays	153.7	169.7	174.7	202.6	207.2	211.9	–	–	–	–	–	–
Tobacco products:												
Total cases	8.6	9.3	8.7	7.7	6.4	6.0	5.8	5.3	5.6	6.7	5.9	6.4
Lost workday cases	2.5	2.9	3.4	3.2	2.8	2.4	2.3	2.4	2.6	2.8	2.7	3.1
Lost workdays	46.4	53.0	64.2	62.3	52.0	42.9	–	–	–	–	–	–
Textile mill products:												
Total cases	9.0	9.6	10.3	9.6	10.1	9.9	9.7	8.7	8.2	7.8	6.7	6.7
Lost workday cases	3.6	4.0	4.2	4.0	4.4	4.2	4.1	4.0	4.1	3.6	3.1	3.4
Lost workdays	65.9	78.8	81.4	85.1	88.3	87.1	–	–	–	–	–	–
Apparel and other textile products:												
Total cases	7.4	8.1	8.6	8.8	9.2	9.5	9.0	8.9	8.2	7.4	7.0	6.2
Lost workday cases	3.1	3.5	3.8	3.9	4.2	4.0	3.8	3.9	3.6	3.3	3.1	2.6
Lost workdays	59.5	68.2	80.5	92.1	99.9	104.6	–	–	–	–	–	–
Paper and allied products:												
Total cases	12.8	13.1	12.7	12.1	11.2	11.0	9.9	9.6	8.5	7.9	7.3	7.1
Lost workday cases	5.8	5.9	5.8	5.5	5.0	5.0	4.6	4.5	4.2	3.8	3.7	3.7
Lost workdays	122.3	124.3	132.9	124.8	122.7	125.9	–	–	–	–	–	–
Printing and publishing:												
Total cases	6.7	6.6	6.9	6.9	6.7	7.3	6.9	6.7	6.4	6.0	5.7	5.4
Lost workday cases	3.1	3.2	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.8	2.7	2.6
Lost workdays	55.1	59.8	63.8	69.8	74.5	74.8	–	–	–	–	–	–
Chemicals and allied products:												
Total cases	7.0	7.0	7.0	6.5	6.4	6.0	5.9	5.7	5.5	4.8	4.8	4.2
Lost workday cases	3.1	3.3	3.2	3.1	3.1	2.8	2.7	2.8	2.7	2.4	2.3	2.1
Lost workdays	58.8	59.0	63.4	61.6	62.4	64.2	–	–	–	–	–	–
Petroleum and coal products:												
Total cases	7.3	7.0	6.6	6.6	6.2	5.9	5.2	4.7	4.8	4.6	4.3	3.9
Lost workday cases	3.1	3.2	3.3	3.1	2.9	2.8	2.5	2.3	2.4	2.5	2.2	1.8
Lost workdays	65.9	68.4	68.1	77.3	68.2	71.2	–	–	–	–	–	–
Rubber and miscellaneous plastics products:												
Total cases	15.9	16.3	16.2	16.2	15.1	14.5	13.9	14.0	12.9	12.3	11.9	11.2
Lost workday cases	7.6	8.1	8.0	7.8	7.2	6.8	6.5	6.7	6.5	6.3	5.8	5.6
Lost workdays	130.8	142.9	147.2	151.3	150.9	153.3	–	–	–	–	–	–
Leather and leather products:												
Total cases	12.4	11.4	13.6	12.1	12.5	12.1	12.1	12.0	11.4	10.7	10.6	9.6
Lost workday cases	5.8	5.6	6.5	5.9	5.9	5.4	5.5	5.3	4.8	4.5	4.3	4.5
Lost workdays	114.5	128.2	130.4	152.3	140.8	128.5	–	–	–	–	–	–
Transportation and public utilities												
Total cases	8.4	8.9	9.2	9.6	9.3	9.1	9.5	9.3	9.1	8.7	8.2	7.3
Lost workday cases	4.9	5.1	5.3	5.5	5.4	5.1	5.4	5.5	5.2	5.1	4.8	4.3
Lost workdays	108.1	118.6	121.5	134.1	140.0	144.0	–	–	–	–	–	–
Wholesale and retail trade												
Total cases	7.7	7.8	8.0	7.9	7.6	8.4	8.1	7.9	7.5	6.8	6.7	6.5
Lost workday cases	3.4	3.5	3.6	3.5	3.4	3.5	3.4	3.4	3.2	2.9	3.0	2.8
Lost workdays	56.1	60.9	63.5	65.6	72.0	80.1	–	–	–	–	–	–
Wholesale trade:												
Total cases	7.4	7.6	7.7	7.4	7.2	7.6	7.8	7.7	7.5	6.6	6.5	6.5
Lost workday cases	3.7	3.8	4.0	3.7	3.7	3.6	3.7	3.8	3.6	3.4	3.2	3.3
Lost workdays	64.0	69.2	71.9	71.5	79.2	82.4	–	–	–	–	–	–
Retail trade:												
Total cases	7.8	7.9	8.1	8.1	7.7	8.7	8.2	7.9	7.5	6.9	6.8	6.5
Lost workday cases	3.3	3.4	3.4	3.4	3.3	3.4	3.3	3.3	3.0	2.8	2.9	2.7
Lost workdays	52.9	57.6	60.0	63.2	69.1	79.2	–	–	–	–	–	–
Finance, insurance, and real estate												
Total cases	2.0	2.0	2.0	2.4	2.4	2.9	2.9	2.7	2.6	2.4	2.2	1.9
Lost workday cases	.9	.9	.9	1.1	1.1	1.2	1.2	1.1	1.0	.9	0.9	0.7
Lost workdays	14.3	17.2	17.6	27.3	24.1	32.9	–	–	–	–	–	–
Services												
Total cases	5.5	5.4	5.5	6.0	6.2	7.1	6.7	6.5	6.4	6.0	5.6	5.2
Lost workday cases	2.7	2.6	2.7	2.8	2.8	3.0	2.8	2.8	2.8	2.6	2.5	2.4
Lost workdays	45.8	47.7	51.2	56.4	60.0	68.6	–	–	–	–	–	–

[1] Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985–88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

[2] Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

[3] The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:

N = number of injuries and illnesses or lost workdays;

EH = total hours worked by all employees during the calendar year; and

200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[4] Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

[5] Excludes farms with fewer than 11 employees since 1976.

– Data not available.

47. Fatal occupational injuries by event or exposure, 1993–98

Event or exposure[1]	Fatalities			
	1993–97	1997[2]	1998	
	Average	Number	Number	Percent
Total	6,335	6,238	6,026	100
Transportation incidents	2,611	2,605	2,630	44
Highway incident	1,334	1,393	1,431	24
Collision between vehicles, mobile equipment	652	640	701	12
Moving in same direction	109	103	118	2
Moving in opposite directions, oncoming	234	230	271	4
Moving in intersection	132	142	142	2
Vehicle struck stationary object or equipment	249	282	306	5
Noncollision incident	360	387	373	6
Jackknifed or overturned—no collision	267	298	300	5
Nonhighway (farm, industrial premises) incident	388	377	384	6
Overturned	214	216	216	4
Aircraft	315	261	223	4
Worker struck by a vehicle	373	367	413	7
Water vehicle incident	106	109	112	2
Railway	83	93	60	1
Assaults and violent acts	1,241	1,111	960	16
Homicides	995	860	709	12
Shooting	810	708	569	9
Stabbing	75	73	61	1
Other, including bombing	110	79	79	1
Self-inflicted injuries	215	216	223	4
Contact with objects and equipment	1,005	1,035	941	16
Struck by object	573	579	517	9
Struck by falling object	369	384	317	5
Struck by flying object	65	54	58	1
Caught in or compressed by equipment or objects	290	320	266	4
Caught in running equipment or machinery	153	189	129	2
Caught in or crushed in collapsing materials	124	118	140	2
Falls	668	716	702	12
Fall to lower level	591	653	623	10
Fall from ladder	94	116	111	2
Fall from roof	139	154	156	3
Fall from scaffold, staging	83	87	97	2
Fall on same level	52	44	51	1
Exposure to harmful substances or environments	586	554	572	9
Contact with electric current	320	298	334	6
Contact with overhead power lines	128	138	153	3
Contact with temperature extremes	43	40	46	1
Exposure to caustic, noxious, or allergenic substances	120	123	104	2
Inhalation of substances	70	59	48	1
Oxygen deficiency	101	90	87	1
Drowning, submersion	80	72	75	1
Fires and explosions	199	196	205	3
Other events or exposures[3]	26	21	16	-

[1] Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

[2] The BLS news release issued August 12, 1998, reported a total of 6,218 fatal work injuries for calendar year 1997. Since then, an additional 20 job-related fatalities were identified, bringing the total job-related fatality count for 1997 to 6,238.

[3] Includes the category "Bodily reaction and exertion."

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dash indicates less than 0.5 percent.